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COUNTY BOROUGH OF NORTHAMPTON

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1945

By **STEPHEN ROWLAND**, M.D.Edin., D.P.H.Camb.,
Medical Officer of Health,
School Medical Officer, and
Chief Tuberculosis Officer.

LEA & Co., LTD., Broad Street Works, Northampton.

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INTRODUCTORY LETTER

To the Mayor, Aldermen, and Councillors of the County Borough of Northampton.

Mr. Mayor, Ladies, and Gentlemen,

I have the honour to present the Annual Report of the Medical Officer of Health for the year 1945, which for statistical purposes embraces a period of fifty-two weeks ended Saturday, 29th December, 1945. This is the seventy-second report of the series and is prepared according to Ministry of Health Circular 28/46 dated 11th February, 1946, and is also the last I shall have the pleasure of submitting.

The birth-rate of 18·1 per thousand of the estimated population shews a fall of 2·6 from the phenomenally high figure (for Northampton) of 20·7 recorded for 1944. At the time of writing it would appear that we are again on the upward grade as regards births. (*See* page 10).

The death-rate was 12·9, while for England and Wales it was 11·4 and for the great towns 13·5. Our local rate was 0·7 above the corresponding figure for 1944. (*See* page 10).

The infantile death-rate was 40·3, that for England and Wales being 46, and for the great towns (of which Northampton is one) it was 54. The local rate was within 1·1 of our record 39·2 registered in 1943. (*See* pages 41 and 42).

The " zymotic death-rate," which was formerly regarded as an index of sanitary conditions, was 0·10, a little over a third of that for 1944 and much nearer our normal rate. (*See* page 33).

Once again there were no maternal deaths in Northampton. The maternal mortality for England and Wales was 1·79 per thousand total births registered. As our maternal death-rate is generally below that for England and Wales, and often considerably below, I think we may pride ourselves on the efficiency of our maternity service. (*See* pages 42 and 67).

The death-rate of 0·72 from all forms of tuberculosis was 0·10 higher than the corresponding figure for England and Wales. The local rate was 1·56 in 1919, my first year in the Department. One of the outstanding features of 1945 was the commencement of mass radiography in the Borough as one of the means of detecting early or incipient tuberculosis of the lungs. The arrangements made for taking over the old Fire Station in Dychurch Lane proved a great success and the whole scheme worked smoothly. The Tuberculosis Dispensary, originally opened on 4th May, 1914, at No. 2 Hazelwood Road, was moved to new and much more commodious premises at No. 11 St. Matthew's Parade, where work commenced on 23rd July, 1945. (*See* pages 40 and 47).

The purity of the public water supply was above suspicion at all times and there was no fear of a shortage. (*See* page 20).

While it may be said that a start has been made to meet the pressing demand for houses, the problem will remain an urgent one for some years, prefabricated or permanent houses notwithstanding. (*See* page 26).

The last evacuee party of expectant mothers from London arrived in Northampton on 18th January, 1946. The total number of women received in these parties from the commencement of evacuation was 4,477. (*See* pages 20, 44, and 67).

One of the crying needs of the time is some provision for old people who do not wish to enter St. Edmund's Hospital, yet cannot find anyone to look after them in their own homes. I see no reason to think the want

will decrease with the passing of years, but rather that the problem will become more urgent with the ageing of the population.

For some considerable time the position regarding nursing and domestic staffs in hospitals and nursing homes has been getting decidedly worse and giving rise to much anxiety, so that at the time of writing all the Borough hospitals are very seriously understaffed, so much so that the Infectious Diseases Hospital, Harborough Road, would be quite incapable of dealing with even a small outbreak of disease. No scheme so far announced is capable of ameliorating the shortage within a reasonable time. The shortage is not confined to hospitals; it exists in the Public Health Office where at the time of writing we are short of a meat and food inspector and three district inspectors.

Death and retirement have robbed the Department of several officers who had been with us for considerable periods. Mr. R. G. A. Britten, who had been on the staff as ambulance driver and disinfecting officer since 5th March, 1928, died on 18th October, 1945, after a short illness. Mr. Fred Taylor, Vaccination Officer since vaccination came within the province of the Department with the coming into force of the Local Government Act, 1929, retired on the last day of 1945. Mr. Taylor commenced duties on 18th August, 1923, under the late Board of Guardians. Mr. William J. Barker, Chief Sanitary Inspector, retired on 30th April, 1946, after forty-three years with the Department. Mr. Barker joined the Public Health staff as a sanitary inspector on 11th August, 1902, and there can be few, if any, inspectors in the Kingdom who have seen such change and progress in public health as he has witnessed. He came in when the work of a sanitary inspector consisted largely in the investigation of infectious diseases and before the special departments of maternity and child welfare, tuberculosis, etc., were started. He has seen the Borough grow from what might be looked upon as a large market town into an industrial town of one hundred thousand inhabitants. Though there will be changes in public health during the next forty or fifty years, it is doubtful if the same amount of progress will be made as during the last half century. I wish him many years of happy retirement.

As I shall myself soon be bidding adieu to the Department, I take this opportunity of thanking everyone—medical officers, sanitary inspectors, nurses, and clerks—for all the help they have given me during these twenty years, six of which were rendered more strenuous by the prevalence of wartime conditions. It is only by harmony and co-operation, such as has existed in the Department for many years, that the best results can be obtained.

I am,
Mr. Mayor, Ladies, and Gentlemen,
Your obedient Servant,

Stephen Rowland

Medical Officer of Health.

PUBLIC HEALTH DEPARTMENT,
7A ST. GILES' SQUARE,
NORTHAMPTON.
JUNE, 1946.

PUBLIC HEALTH STAFF

Medical Officer of Health, School Medical Officer, and Chief Tuberculosis Officer	STEPHEN ROWLAND, M.D. Edin., D.P.H. Camb.
Tuberculosis Officer	NORMAN B. LAUGHTON, M.B., Ch.B., D.P.H.
Assistant Medical Officer for Maternity and Child Welfare	MRS. M. MARTIN WILLIAMS, M.B., Ch.B.
Sanitary Inspectors ..	W. J. BARKER*† (*Chief Inspector and Rat Officer*) B. KNOWLES*† (*also Inspector of Common Lodging Houses*) T. L. BOAST*† S. A. TENCH* W. L. MONKS*† (*also Inspector of Canal Boats*) M. T. PARRY*† (*Meat and Food Inspector*)
Health Visitors ..	MISS S. M. WEEKS‡‖¶ (*Superintendent*) MRS. F. H. SMITH‡‖§ MISS F. M. V. BLYTHE BROWN‡‖ MISS R. M. BRADY‡‖¶ MISS A. E. NORGATE‡‖¶ MISS J. E. DENT‡‖¶ MISS E. HOWARD‡‖§¶ MISS M. M. BEER‡‖¶℔
Tuberculosis Nurse ..	MISS L. REESE ‖
Almoner	MISS J. ADAM (*Tuberculosis Dispensary*)
Matrons	MISS M. E. NORMAN‖§ (*Harborough Road Infectious Diseases Hospital*) MISS K. B. STONE‖§ (*Welford Road Tuberculosis Hospital*)
Clerks	A. F. KNIGHT (*Chief Clerk*) S. J. KNIGHT (*Tuberculosis Dispensary*) H. T. BOSWELL MISS D. E. ADNITT (*Infant Welfare Centre*) L. BLAKE℔ A. N. WRIGHT℔ W. G. TOMALIN℔ R. A. DIMENT℔ J. D. HAWKINS℔ MISS T F. SMITH (*Infant Welfare Centre*) MRS. E. I. SMALLEY (*Tuberculosis Dispensary*) MISS I. J. HORN (*Tuberculosis Dispensary*)
Removal and Disinfecting Staff	A. W. BLASON W. G. SMITH F. J. R. MISSIN
Rat-catcher	W. E. J. DUNKLEY

All the above are whole-time Officers. School Medical Staff is not included.
*Holds Inspector's Certificate of the Royal Sanitary Institute.
†Holds Certificate for Inspecting Meat and Other Foods.
‡Holds Certificate of the Central Midwives Board.
‖General Trained Nurse.
§Fever Trained Nurse.
¶Holds Health Visitor's Certificate.
℔Temporary Appointment.

SUMMARY OF STATISTICS

Latitude..... 52° 14′ North Longitude.....	0° 54′ West
Height of Guildhall above general mean sea level (in feet)	252
Area of Borough (in acres)	6,201
Population :—	
Census 1931 (before extension)	92,341
Census 1931 (including area added 1st April, 1932)	96,546
Registrar-General's Estimated Civilian Population for 1945	98,520
Number of Inhabited Houses :—	
Census 1931	23,141
According to Rate Books (31st December, 1945)	29,400
Number of Families or Separate Occupiers (Census 1931) ...	24,966
Rateable Value (31st December, 1945)	£812,564
Yield of One Penny Rate (31st December, 1945)	£3,250

EXTRACTS FROM VITAL STATISTICS FOR THE YEAR 1945

		TOTAL.	M.	F.		
Live Births	Legitimate	1,598	833	765	Birth-rate	18·1
	Illegitimate	190	99	91		
	Total	1,788	932	856		
Stillbirths	Legitimate	36	17	19	Rate	0·40*
	Illegitimate	3	1	2		
	Total	39	18	21		
Deaths		1,273	638	635	—Death-rate	12·9
Percentage of Total Deaths occurring in Public Institutions ..						51·9
Number of Women dying in, or in consequence of, Childbirth	From Sepsis	0				0
	From Other Causes	0				
Deaths of Infants under One Year of Age per 1,000 Live Births :— Legitimate.. 33·2 Illegitimate.. 100·0 Total						40·3

	NUMBER.	RATE.
" Zymotic Deaths "	10	0·10
Deaths from Measles	3	0·03
Deaths from Whooping Cough	1	0·01
Deaths from Diarrhœa (under two years of age)	6	†
Deaths from Respiratory Tuberculosis	61	0·62
Deaths from Other Tuberculous Diseases	10	0·10
Total Tuberculosis Deaths	71	0·72
Deaths from Cancer	188	1·91
Deaths from Influenza	5	0·05

*21·3 per 1,000 Total (Live and Still) Births Registered.
†3·4 per 1,000 Live Births Registered.

I.—STATISTICS AND SOCIAL CONDITIONS

Population. The Registrar-General estimated the civilian population of the County Borough of Northampton for 1945 to be 98,520, or 1,520 below his estimate for 1944. As mentioned in previous reports these figures are only estimates based on births, deaths, movements of the civilian population backwards and forwards during the war years, etc. The last census took place so far back as 1931 ; the one which should have been taken in 1941 was postponed owing to the war-time conditions prevailing.

The natural increase of the population, *i.e.*, the excess of live births over deaths, for 1945 was 515, or 5·23 per thousand living. For many years prior to the late war, owing to the very low birth-rate, the natural increase of the local population was practically nil, in other words the live births were only sufficient to balance the deaths.

Births. 1,788 live births (932 males, 856 females) were registered, giving a birth-rate of 18·1 per thousand of the estimated civilian population, compared with 16·1 for England and Wales and 19·1 for the 126 county boroughs and great towns, including the metropolitan boroughs. The local birth-rate shewed a decrease of 2·6 per thousand compared with the rate for 1944. Table 1 (page 72) gives the rates for the last decennium compared with those for England and Wales. 190 (10·6 per cent.) of the births were illegitimate. For 1944 the illegitimate rate was 9·4 per cent., while for 1938 it was 3·2 per cent.

Stillbirths. Thirty-nine stillbirths were registered, giving a rate of 0·40 per thousand of the population, compared with 0·46 for England and Wales. The rate expressed per thousand total births (including stillbirths) registered was 21·3, while for England and Wales it was 28.

Additional notes on stillbirths appear on page 63.

Deaths. 1,273 deaths (638 males, 635 females) were registered, equal to a death-rate of 12·9, compared with 11·4 for England and Wales and 13·5 for the great towns. Table 2 (page 72) gives the local and national death-rates for the last ten years.

64·0 per cent. of the deaths related to elderly persons aged sixty-five years and upwards. This is what one might expect with such a large proportion of the population at ages over fifty, chiefly due to the low birth-rate extending back over a long period.

823 persons, comprising residents and non-residents, died in local institutions, equivalent to 51·9 per cent. of the total deaths ; or, in other words, less than half of the persons dying in Northampton died in their own homes—one of the trends of modern times. The deaths of non-residents (with the exception of evacuees) were transferred by the Registrar-General to their respective areas, while the deaths of Northampton residents which occurred outside the Borough were credited to us as " inward transfers."

Seventy-eight deaths occurred for which no medical certificates of the causes of death were furnished, compared with ninety-five during 1944.

These comprised forty-seven inquests, twenty-one coroner's certificates after post-mortem examinations without inquests, and ten uncertified, equivalent to 6·1 per cent. of the nett deaths registered.

Table C at the end of this report, giving the causes of death in the different age-periods, was prepared in the Public Health Department from information supplied weekly by the local registrars. The classification agrees very closely with the figures received from the Registrar-General on 6th June, 1946.

State of Employment. The Manager of the Local Employment Exchange has again kindly furnished information from which the following notes were compiled.

Although employment in Northampton was affected by the events which took place during 1945, it remained at a relatively high level. A slight increase in the number of male workers registered as unemployed occurred from time to time, but the position compared favourably with employment in previous years. There were ample opportunities of employment for men, women, and juveniles throughout the district, but a few unskilled male workers in the higher age-groups remained out of a situation. Members of the Forces released under Class A had no difficulty in finding employment. Unemployment amongst women and juveniles was negligible.

If I may say so, I think it was more difficult to get anything done during 1945 (and the same conditions prevail at the time of writing) than at any time during the late war. Mention of these conditions will be found elsewhere in this report.

No persons were receiving unemployment relief from the Public Assistance Committee at the end of the year.

Meteorology. I have again to thank Messrs. R. H. Primavesi, Ltd., for supplying the data (*see* Table 4, page 73) from which these notes were compiled.

The total rainfall for 1945 was 23·37 inches, *i.e.*, 1·20 inches above the drought year 1944 and 1·47 below the average for the past forty-one years, 1904 to 1944 inclusive. For a considerable period the average rainfall in Northampton was about twenty-four inches, but owing to several wet years during the past decade it rose at the end of 1941 to 25·14 ; 1935, 1936, 1937, 1939, 1940, and 1941 were all above the average, some considerably so, whilst 1942, 1943, and 1944 were below. At the end of June, 1945, the rainfall was 1·30 inches below the average for the six months and, as before stated, it remained below until the end of the year. The wettest month was October with a fall of 3·49 inches, whilst the driest was November with 0·44 inch. The heaviest fall recorded occurred during the week-end of July 14/15, when 1·15 inches were registered. The number of days on which 0·01 inch (generally considered to be the smallest measurable amount) or more of rain fell was 176, or thirty fewer than in 1944.

The highest shade temperature recorded was 86°F. on 4th August. The lowest reading of the thermometer, 17·5°F., occurred on 26th

January. There were forty-four cold nights, *i.e.*, nights during which the temperature fell to 32°F. (freezing point) or below that figure. I regret to say we are still unable to obtain a record of bright sunshine owing to the difficulty of getting the necessary recording cards. The prevailing wind was south-west on 138 days, north-west on 117, south-east on 59, and north-east on 51.

Other Statistics. The notes on infant and maternal mortality, notifiable and other diseases, housing conditions, and other statistics usually included in the annual report, will be found under the headings referring to these matters.

Attention is also directed to the statistics on page 9 and to Tables A, B, C, and D at the end of this report.

II.—GENERAL PROVISION OF HEALTH SERVICES

Public Health Officers. A list of the whole-time officers of the Public Health Department on 31st December, 1945, appears on page 8. This does not include the names of two sanitary inspectors and two clerks on military service, one health visitor away doing military nursing, and one clerk directed to other work.

For part-time staff connected with the Department see note in my report for 1941, page 12.

The staff employed in the school health service is given in the paragraph dealing with that subject on page 19.

Laboratory Facilities. These remained as in the previous year and were quite adequate for our needs, the greater part of the work being performed in the Emergency Public Health Laboratory at Northampton General Hospital. The amount of bacteriological work undertaken for, or on behalf of, the Department has increased considerably since the establishment of the Emergency Public Health Laboratory. (*See* Table 13 on page 81).

Ambulance Facilities. The Department's ambulances comprise one very good " Austin " ambulance and two other motor vehicles, one of which was a wartime ambulance under the civil defence scheme. This was slightly altered after it came into the possession of the Public Health Department and serves as a secondary ambulance. The third vehicle is not used for the removal of patients. These satisfy our needs, though the last mentioned is old and worn out and will be replaced when we can find a suitable substitute.

Nursing in the Home. Practically all the nursing which is given in the homes is given by members of the Queen's Institute of District Nursing and consists chiefly of visits, not as residence in the homes of the sick. Though much was heard during the past year or two regarding the strengthening of this service in view of a possible epidemic of influenza, when we asked for volunteers we met with no response worthy

of notice. As I said on a previous occasion, suitable women are not forthcoming.

Treatment Centres and Clinics. No addition was made to these centres, which met our needs.

Municipal Hospitals. Full reports on these hospitals were given in my reports for 1930 and 1931 and any additions or alterations made since have been recorded in subsequent reports.

Infectious Diseases Hospital, Harborough Road. No work of any importance was undertaken at this hospital owing to difficulty of obtaining labour and supplies. (*See also* pages 14 and 37).

Tuberculosis Hospital, Welford Road. Nothing of any importance in the nature of repairs or alterations was attempted at this hospital. (*See also* pages 13, 38, and 54).

Smallpox Hospital, Mere Way. Only outside painting, chiefly to the roofs, was attempted. (*See also* pages 14 and 38).

St. Edmund's Hospital, Wellingborough Road. No alterations or constructions were undertaken at this hospital. The tradesmen on the staff merely kept the fabric in good repair and did the necessary redecorations. (*See also* pages 13 and 38).

Regional Hospitals Survey. On Friday, 20th August, 1943, the officers appointed by the Ministry of Health and the Nuffield Provincial Hospitals Trust made a survey of all the hospitals in the Borough, both municipal and voluntary. For this purpose the County of Northamptonshire was attached to the Birmingham and West Midlands Area while for other health services it forms part of the North Midland Region. The surveyors were Robert Veitch Clark, Esq., M.B., D.P.H., formerly Medical Officer of Health for the City of Manchester, John B. Hunter, Esq., F.R.C.S., Professor of Surgery at King's College, London, and Sir Ernest Hart, M.B.E., late Clerk to the Middlesex County Council. They were accompanied on their inspection by Charles T. Maitland, Esq., M.D., F.R.C.P., Principal Regional Medical Officer of the No. 9 Midland Region, Ministry of Health. The report on the survey was received on 25th October, 1945.

The surveyors give a concise description of St. Edmund's Hospital stating the number and allocation of the beds. It is pointed out that it is only the chronic sick who are treated here. No suggestions are made as to the necessity for additions or for the transfer of the institution to another site further from the centre of the Town, a subject which has been under consideration (with periods when the matter fell into abeyance) for a number of years.

The Borough Tuberculosis Hospital, Welford Road, did not receive very favourable comment from the surveyors, who recommend that it " should be discontinued for the treatment of patients with early and moderate-stage disease and that the Town Council should arrange for this either at Creaton or Rushden House." Thus Welford Road Hospital would revert to what it was thirty years ago, viz :—a hospital for advanced cases.

Regarding the Borough Infectious Diseases Hospital, Harborough Road, the surveyors advise that, " taking the long view, Northampton Isolation Hospital should serve the whole County for acute infectious diseases ; it has been found too large for the area hitherto served and would meet the need if a sufficiency of single-bed wards was provided."

The Smallpox Hospital, the surveyors say, is good of its class. For the treatment of smallpox " the surveyors favour separate accommodation at the general isolation hospital ; they would not retain any hospital in the County exclusively for smallpox. The buildings of the present Northampton Smallpox Hospital, if they are found worth preserving, might be used for another purpose on the understanding that in face of a large outbreak of smallpox it would have to be cleared and used for the duration of the emergency."

Voluntary Hospitals, etc. A description of Northampton General Hospital, Manfield Orthopædic Hospital, Creaton Sanatorium, and the County Mental Hospital, Berry Wood, appeared in my survey report for 1930. Additions and improvements have been made in all these institutions from time to time, some of which cannot at present be utilised owing to shortage of nursing and domestic staffs. A new ward of forty beds at Manfield Orthopædic Hospital remains closed and the number of patients at Creaton Sanatorium had to be reduced owing to this shortage. At the time of writing an addition is about to be made to the Maternity Department at Northampton General Hospital. This additional block, which is of a semi-permanent character and includes maternity and observation wards, has accommodation for thirty beds as well as cots in the nursery. The estimated cost is over £20,000, to be provided by the County and Borough Councils, who will share the beds on an equal footing.

Poor Law Medical Out-relief. No change was made in this service which is working satisfactorily. For purposes of out-relief the Borough is divided into three areas, the medical officers being :—

No. 1 District (comprising Kingsley, St. Edmund's, St. George's, St. Michael's, South, and Weston wards)—Dr. E. Robertson, 220 Kettering Road ;

No. 2 District (Castle, Kingsthorpe, St. Crispin's, St. James', and Spencer wards)—Dr. J. Cullen, 5 St. Matthew's Parade ; and

No. 3 District (Delapre ward)—Dr. H. F. Percival, 2 Spencer Parade.

The " open choice " system of medical out-relief has not been introduced in Northampton. There are no district medical officers devoting the whole of their time to public health work.

Care of Mental Defectives. No change was made in this service. From the annual report of the Mental Welfare Officer (Miss E. M. Aplin) it appears that thirty-eight new cases were brought to the notice of the Mental Welfare Department during 1945. At the end of the year there

were thirty-six Borough patients in residence at Bromham House Colony, near Bedford, eight at Rampton State Institution, Retford, Nottinghamshire, eight at St. Edmund's Hospital, and twenty-eight in other certified and approved institutions, making a total of eighty. Five patients were on licence from various certified institutions and were gainfully occupied. The number of mentally defective persons under supervision in the Borough at the end of the year was 184. This number increases every year; it does not necessarily indicate that the incidence of mental defect is increasing but rather that the mental welfare service is becoming more widely known. 107 of these 184 were gainfully employed.

The Handicraft Centre, held at St. Giles' Church Buildings from 2 to 4.30 p.m. from Monday to Friday each week, continues to meet the educational and social needs of mental defectives of both sexes and of varying ages. Thirty-one children and young people attended the Centre regularly.

St. Edmund's Hospital, which is administered by the Public Assistance Committee as a "mixed institution," is certified under Section 37 of the Mental Deficiency Act, 1913, for the temporary reception of nine medium to low grade mental defectives, of either sex, over the age of sixteen years.

Maternity and Child Welfare. The information required by the Ministry of Health on the services provided under the following headings will be found in Section VII. of this report dealing with maternity and child welfare, on pages 41 to 44 :—

(*a*) Midwives Act, 1936 ;
(*b*) Institutional Provision for Mothers and Children ;
(*c*) Health Visitors ;
(*d*) Child Life Protection ;
(*e*) Dental and Orthopædic Treatment ;
(*f*) Otorrhœa.

Maternity and Other Nursing Homes. At the end of the year there were five nursing homes on the register, viz :—

Maternity Homes	2
Mixed Home	1
Home for Non-maternity Cases	1
Home for Mothers and Babies (St. Saviour's)	1

The last mentioned institution is situated in Manor Road, Kingsthorpe, and is managed by a committee of the Peterborough Diocesan Authorities on which the Borough Maternity Committee is represented by two members, viz :—Councillor Mrs. O. M. Lee (Chairman of the Maternity and Child Welfare Committee) and Mrs. J. Martin. The home is for unmarried mothers who are retained, along with their babies, in the institution for an average period of four and a half (formerly six) months, during which period they receive training in domestic duties as well as child management. There are seldom any vacant beds in the home. A general practitioner is on call.

These institutions contain fifty-four beds (including forty-three for maternity cases). They are inspected at regular intervals by the Assistant Medical Officer for Maternity and Child Welfare, the officer appointed by the Local Authority to carry out this duty. (*See* page 65).

Five institutions were exempted from registration under Section 192 of the Public Health Act, 1936, viz :—Northampton General Hospital (including Barratt Maternity Home), Margaret Spencer Home of Rest, Manfield Orthopædic Hospital, John Greenwood Shipman Convalescent Home, and Bethany Homestead Nursing Home.

Legislation in Force. Appended is a list of Local Acts and Orders, General Adoptive Acts, and Byelaws relating to public health in force in the County Borough :—

LOCAL ACTS AND ORDERS.

Northampton Improvement Act, 1843.
Northampton Waterworks Act, 1861.
Northampton Corporation Markets and Fairs Act, 1870.
Northampton Improvement Act, 1871.
The Local Government Board's Provisional Orders Confirmation (Arundel, etc.) Act, 1876.
Northampton Waterworks Act, 1882.
Northampton Corporation Act, 1882.
Northampton Corporation Waterworks Act, 1884.
Local Government Board's Provisional Orders Confirmation (No. 4) Act, 1892.
Local Government Board's Provisional Orders Confirmation (No. 14) Act, 1900.
Local Government Board's Provisional Orders Confirmation (No. 10) Act, 1907.
Northampton Corporation Act, 1911.
Northampton Corporation Water Act, 1913.
Northampton Corporation Act, 1922.
Ministry of Health Provisional Orders Confirmation (No. 1) Act, 1925.
Northampton Extension Act, 1931.
Ministry of Health Provisional Order Confirmation (Northampton) Act, 1932.
The Northampton (Phoenix Street) Housing Confirmation Order, 1935.
The Northampton (Tanner Street) Housing Confirmation Order, 1935.
The Northampton (Spring Lane No. 1) Housing Confirmation Order, 1936.
The Northampton (Nelson Street No. 1) Housing Confirmation Order, 1937.
The Northampton (St. George's Square) Housing Confirmation Order, 1937.

The Northampton (Paradise Row) Housing Confirmation Order, 1937.
The Northampton (St. Edmund's Terrace No. 1) Housing Confirmation Order, 1937.
The Northampton (St. Edmund's Terrace No. 1A) Housing Confirmation Order, 1937.
The Northampton (Cliff Row No. 1A) Housing Confirmation Order, 1937.
The Northampton (Adelaide Place) Housing Confirmation Order, 1937.
The Northampton (Chapel Place) Housing Confirmation Order, 1937.
The Northampton (Doddridge Street) Housing Confirmation Order, 1938.
The Northampton (St. Mary's Street No. 1) Housing Confirmation Order, 1938.
The Northampton (St. Mary's Street No. 2) Housing Confirmation Order, 1938.
The Northampton (Dallington Road) Housing Confirmation Order, 1938.
The Northampton (Arundel Street) Housing Confirmation Order, 1938.
The Northampton (Welford Road) Housing Confirmation Order, 1938.
The Northampton (High Street) Housing Confirmation Order, 1938.
The Northampton (Brook Lane) Housing Confirmation Order, 1938.
The Northampton (Kingswell Road) Housing Confirmation Order, 1938.
The Northampton (Ash Street) Housing Confirmation Order, 1938.
The Northampton (Kingswell Street No. 1) Housing Confirmation Order, 1938.
The Northampton (Kingswell Street No. 2) Housing Confirmation Order, 1938.
The Northampton (St. Peter's Street, etc.) Housing Confirmation Order, 1938.
The Northampton (Woolmonger Street) Housing Confirmation Order, 1938.
The Northampton (Gregory Street) Housing Confirmation Order, 1938.
The Northampton (St. Peter's Street, etc.) Housing Confirmation Order No. 1, 1938.
The Northampton (York Place) Housing Confirmation Order, 1938.
The Northampton (Extension of Time) Order, 1938.
The Northampton Corporation Act, 1943.

GENERAL ADOPTIVE ACTS.

*Public Health Acts Amendment Act, 1890 :—
Parts I., II., III., and V. (adopted 6th April, 1891) ;
Part IV. (7th December, 1942).

*Public Health Acts Amendment Act, 1907 :—
Part II., except s. 19 (adopted 3rd July, 1911) ;
Part III. (s. 50 adopted on 28th August, 1912, s. 47 on 21st December, 1923, and remainder of sections on 21st March, 1932) ;
Part IV., except s. 68 (21st March, 1932) ;
Part V. (21st March, 1932) ;
Part VI. (3rd July, 1911) ;
Part X., s. 95 (14th November, 1922).

*Public Health Act, 1925 :—
Parts II., III., IV., and V., except ss. 21, 25, 27, and 34 in Part II. and ss. 48 and 49 in Part IV. (adopted 8th March, 1926) ;
Part II., s. 21 (15th May, 1926).

**NOTE.—Certain of the public health provisions of these Acts were repealed by the Public Health Act,* 1936, *and re-enacted in that Act as general legislation.*

BYELAWS.

UNDER THE PUBLIC HEALTH ACTS :—
Slaughterhouses (confirmed 1887, 1929, and 1932).
Cemeteries (1910, 1934, 1936, and 1937).
Tents, Vans, Sheds, and Similar Structures used for Human Habitation (1914 and 1932).
Luggage Porters and Light Porters (1924).
Pleasure Grounds, &c. (1926 and 1933).
New Streets (1927 and 1932).
Nursing Homes (1929 and 1932).
Imposing on Occupier duties in connection with Removal of House Refuse (1932).
Common Lodging Houses (1932).
Hackney Carriages, Carriers' Carts, and Other Vehicles (1938).
Nuisances from Snow, Filth, Ashes, &c., Keeping of Animals (1939).
Regulation of Offensive Trades, Businesses or Manufactures and the Trade or Business of Fish Frying (1939).
Building (1939).

UNDER NORTHAMPTON CORPORATION WATER ACT, 1913 :—
Prevention of Pollution (1915).

UNDER MUNICIPAL CORPORATIONS ACT, 1882 : —
Good Rule and Government (1929).

Blind Persons. At the end of 1945 the number of blind persons resident in the Borough was 217, classified as follows :—

8 were St. Dunstan's trained men working at home ;
4 were in residential homes ;
2 were in mental homes ;
3 were in the County Mental Hospital ;
4 were in St. Edmund's Hospital ;
2 were undergoing industrial training ;
3 were at schools for the blind ;
27 were employed in the Workshops, Gray Street ;
2 were employed as homeworkers ;
9 were employed elsewhere ; and
153 were classified as unemployable and were living at home or in lodgings.

During the year, seventeen persons were examined by the ophthalmic surgeon with a view to being registered under the Blind Persons Act, of whom three were found to be " not blind."

With the cessation of hostilities, most of the blind evacuees returned to their home towns and by the end of the year there were only fourteen blind evacuees residing in the Borough, these persons having no homes to which to return and waiting for accommodation to be found for them in their home towns. The hostel " Brabourne " for blind evacuees was closed in October.

No action was taken under Section 176 of the Public Health Act, 1936, as none was considered necessary.

School Health Service. The Medical Officer of Health, acting as School Medical Officer in an administrative capacity, keeps the Public Health and School Health Service Departments in close touch with each other.

The whole-time permanent staff employed in school health work at the end of the year consisted of one medical officer designated Temporary Assistant School Medical Officer, one dentist, two nurses, and four clerks. Three nurses and one clerk were also employed whole time on a temporary basis. One ophthalmic surgeon and a radiologist were employed part time and an ear nose and throat specialist (E. Broughton Barnes, Esq., F.R.C.S.Ed.) was also employed on a part-time basis. Dr. Stanley E. Bethell and Dr. Mary Hendrie continued to be employed on a part-time basis and Dr. C. A. Keane, the Medical Superintendent of the County Mental Hospital, Berry Wood, also officiated in a part-time capacity as consultant in mental deficiency.

The average number of local scholars on the registers of public elementary schools for the year ended 31st December, 1945, was 10,124, with an average attendance of 9,075 (89·6 per cent.). The average number of evacuee children on the registers was 668, with an average attendance of 601 (90·0 per cent.). The number of evacuee school children in the Borough at the end of 1945 was 124, compared with 7,290 at the end of 1940.

The annual report of the School Medical Officer, prepared according to the requirements of the Ministry of Education for the Education Committee, is published separately and gives details of the work carried out by the school health service. (*See also* " Schools," page **23**).

Evacuation Scheme. Hostilities in Europe coming to a somewhat abrupt close during the early summer after a period of increased aerial activity over London and the south-eastern area led to a rather quick return to London of many of the evacuees, both children and adults. The scheme for the reception and billeting of these persons was fully explained in my report for 1939. As this is likely to be the last report in which evacuees are mentioned, it may be well to give the number of evacuees remaining in the Town on 5th January, 1946 :— expectant mothers 38, helper 1, other adults 56, school children 124, children under school age 5, juveniles employed 13, making a total of 237, compared with 14,550 in 1940.

I take this opportunity of saying how well the large amount of work involved in what was termed the evacuation scheme was carried out by the Chief Education Officer and his assistants. It was not to be expected that every evacuee could be lodged under ideal conditions either in Northampton or elsewhere. In addition to the official evacuees there came to the Town a considerable number of unofficial ones, *i.e.*, persons who left London and other places for Northampton owing to wartime conditions. Many of these have not, for private reasons, thought fit to return to their former abodes and it may be expected that most of those who are still here will settle down and become Northampton citizens.

Parties of expectant mothers continued to arrive weekly from London long after all bombing had ceased. The last party to arrive came on 18th January, 1946. My information is that at the time of writing all had returned to London after confinement in St. John's Emergency Maternity Home, Weston Favell. The total number of " official " expectant mothers who registered at the St. Giles' Street Centre from 2nd September, 1939, to 18th January, 1946, was 4,005. Many other " unofficial " ones came into the Town during that period and we have record of 472 of them.

Further references to evacuation are made in Section VII. of this report dealing with maternity and child welfare on page 44 and in Appendix II., page 67.

III.—SANITARY CIRCUMSTANCES

Water. Particulars relating to the waterworks at Teeton and Hollowell and the sources of the public water supply of Northampton were given in previous reports. While we did not suffer any water shortage in the Borough during 1945, in spite of the rainfall for the year being slightly below the average, we were never in a position when it was permissible to waste water. As a matter of fact, water drawn from a public supply should never be wasted, because it is a commodity which costs money to purify and deliver to the consumer.

As mentioned in former reports, the water is both filtered and chlorinated and reaches a high degree of bacteriological purity. This state is not reached by overcharging with chlorine, as proved by the fact that no trace of chlorine was detected by the bacteriologist during the year, and any assertions that the water smelled or tasted of chlorine are based on a wrong assumption. Eighty-eight samples collected from different points of supply were submitted to Dr. Arthur Davies of the Devonport Pathological Laboratories, Greenwich, and good reports were received in all instances ; no coliform organisms were detected in 100 millilitres of any sample.

The average daily consumption of water in the Borough was estimated to be roughly twenty-two gallons per head of the population.

Drainage and Sewerage. The sewerage system of the Borough was described in my report for 1933 after the construction of the new outfall sewer and the works at Ecton, where after screening and sedimentation the sewage is subjected to land treatment and finally discharged into the River Nene. The effluent before discharge is under constant supervision and examination by the resident chemist. The amount of rainfall has a considerable effect on the sewage, not only the amount to be dealt with but also its strength and the amount of water in the river at the point of discharge. These are all matters which it is not easy to regulate and which make the disposal of the sewage of large inland towns a very serious problem.

Rivers and Streams. In spite of the considerable periods of drought, when the Nene reached a very low level, the river was never in such a state as to be a source of nuisance and there was never enough water in it to cause flooding.

Closet Accommodation. No conversions from pail closets or privies to the water-carried system were undertaken, nor were any of the thousands of hand-flushed closets fitted with cisterns. It would appear that this work, which is long overdue, will have to wait still longer before it can be carried out. The matter was postponed for years owing to lack of water : when water became more plentiful following the opening of the Hollowell Reservoir there came a shortage of materials and labour, and finally the war. In the meantime no deleterious effects have resulted from hand flushing.

Public Cleansing. This continues to be as efficiently carried out as post-wartime conditions allow. One weekly collection of household refuse (a wartime measure) instead of two continued up to the time of writing.

Sanitary Inspection. The work of the sanitary inspectors is summarised in Table 5 (page 74) and Table 6 gives particulars of drainage reconstruction. During the year, 1,382 houses were inspected, of which 852 were found to require attention, with the result that 660 were

repaired, 462 were cleansed and whitewashed, while others were dealt with as conditions required, details of which appear in Table 5.

For some years I have been stressing the difficulty of getting repairs to property effected. It was hoped that after the cessation of hostilities things would take a turn for the better, but up to the time of writing we are still awaiting the turn ; in fact, it seems more difficult to get anything done now than at any time during the war.

Shops and Offices. During 1945 no premises were referred to us by the Inspector of Weights and Measures for necessary action under subsections (1) and (2) of Section 10 of the Shops Act, 1934.

Smoke Abatement. No action was taken in connection with any smoke abatement scheme. Owing to the staple industries being of a light character and the extensive use of electricity and gas as motive power, smoke abatement is not one of our problems. From this one is not to infer that the small number of industrial chimneys in the Town do not at times emit " black smoke," but a few words of advice from the district sanitary inspector puts that matter right without legal action. We have no byelaw relating to the emission of black smoke. I have seen it stated by enthusiasts for smoke abatement that household chimneys are greater offenders than industrial ones. In my opinion, that is simply shutting one's eyes to fact. There are more domestic chimneys in Northampton than in Motherwell, but there is no comparison between the atmospheric conditions—the amount of smoke and dirt in the air of the two places. These good people never mention the very efficient ventilation provided by the much despised domestic fireplace and chimney.

Swimming Baths and Pools. Northampton is very well supplied with swimming facilities, both open air and enclosed, the Public Baths, Upper Mounts, being a splendid example of what baths should be, whilst the open-air swimming pool, commonly called Midsummer Meadow Baths, is a very large sheet of water with pleasant surroundings. Although the latter is on a portion of the river which has flowed through the Borough, the water is quite fit for bathing, being free from pollution. Three samples taken from the enclosed baths, where the water is subjected to continuous filtration and chlorination, were pronounced by the bacteriologist to be " good samples of water, bacteriologically, and free from any trace of contamination." I might go further and say the report shewed the water was almost sterile.

Not quite such a good report was received concerning the water from Barry Road School Bath, about which I have remarked on former occasions, though it is much more satisfactory than formerly.

Eradication of Bed Bugs. The Ministry of Health requires certain information regarding the eradication of bed bugs set out according to a prescribed form :—

(1) During 1945 traces of bugs were found in forty-five Council houses, the majority of the infestations being of a slight nature.

(2) The methods of disinfestation employed are :—
   (*a*) The use of a spray, the insecticide used being " Clymax " ;
   (*b*) Fumigation by means of sulphur candles, *i.e.*, sulphur dioxide gas ;
   (*c*) Treatment by means of a blow-lamp, probably the most effective method. Where necessary, the woodwork (skirting boards, picture rails, etc.) is removed prior to treatment.

(3) The furniture of tenants from bug-infested houses is treated before removal into new houses. Soft articles (clothing, bedding, etc.) are disinfested by steam at the Disinfecting Station, St. Andrew's Road. Furniture or articles which would be ruined by steam disinfection are sprayed with insecticide.

(4) The work of disinfestation is carried out by officers of the Local Authority.

(5) Supervision or the education of tenants is given when Housing Department representatives are treating premises, so as to prevent re-infestation after cleansing, and here I would say much depends on the tenant.

Schools. The Medical Officer of Health (the nominal School Medical Officer), together with the Assistant School Medical Officer and the sanitary inspectors, kept the sanitary conditions of the schools under observation during the year.

Canal Boats. The annual report under Section 249 (3) of the Public Health Act, 1936, was dispatched to the Ministry of Health before the appointed date, viz :—21st January. Mr. W. L. Monks, the Canal Boats Inspector, reports that twenty boats, registered to carry fifty-nine adults, were inspected during the year. The actual number of occupants was twenty-nine adults and fifteen children. One boat required minor repairs and one boat was travelling without a registration certificate. No legal proceedings were necessary, letters from the Department being sufficient. No case of infectious disease was notified and no boat was detained for disinfection, nor was any boat registered during the year. The number of boats on the register believed to be in use is three.

From time to time one hears plans or hopes of the canals taking on a new lease of life. Personally, I cannot see this coming about, for, although water carriage is the cheapest form of transport, it is probably the slowest—too slow for the present age.

Common Lodging Houses. At the end of the year there were two common lodging houses on the register, viz :—

PREMISES.	ACCOMMODATION (MEN).
38/40 Compton Street	8
5 St. Andrew's Street	34
Total	42

No. 31 Mayorhold was closed on 20th April, 1945, owing to illness of the proprietress. The premises might, and probably would, have remained longer on the register if a suitable deputy could have been found. We have been aware of this difficulty for some time and also of the difficulty of lodging house proprietors obtaining bedding, etc. Inspector B. Knowles, the Inspector of Common Lodging Houses, kept these premises under frequent supervision as the only means of keeping them up to a reasonable standard. There has been during comparatively recent years a considerable falling off in the accommodation for casuals in the Borough and one might say that during the war there were not so many of these travellers on the road. If they ever again become as numerous as they were twenty or thirty years ago, I think the Local Authority should make provision for them by building and equipping an up-to-date lodging house under the management of its own officers. This would be more satisfactory from every point of view.

Factories. Table 8 (page 77) gives particulars of work done under the Factories Act, 1937.

Offensive Trades. No application for the commencement of any offensive trade was received during the year. At the end of December there were fourteen names on the register, viz :—two tanners, three tripe boilers, one fat melter, one bone dealer, and seven rag and bone dealers. All these offensive trades were kept under supervision by the district inspectors and were conducted with a minimum of nuisance.

Tents, Vans, Sheds, etc. We have no tent or shack dwellers in the Borough and no camping sites.

Premises controlled by Byelaws, etc. Particulars of these, excepting the above-mentioned, will be found in Section V. (pages 28 to 33) dealing with food, as they comprise cowsheds, dairies, bakehouses, slaughterhouses, ice-cream shops, etc.

Rag Flock Acts, 1911 and 1928. The object of these Acts, as explained in former reports, is to prevent the use in cheap furniture of flock, etc., made from material which has been contaminated by human excreta. With a view to preventing this occurring, a certain chemical standard is prescribed, below which the rag flock must not fall if it is to be used in the furniture trade. The Chief Sanitary Inspector paid seven visits to establishments where rag flock is used, for the purpose of inspecting the invoices. As a result of these inspections it was not considered necessary to take any samples.

Rat Repression. The Borough Rat-catcher, working under the supervision of the Chief Sanitary Inspector, continued to make every week a " rat week " and accounted for 1,832 tails. His advice and help are at the service of any Borough ratepayer on application being made to the Public Health Office. Owing to the Inspector who took a leading part in the national rat campaign leaving the Department in January,

followed shortly afterwards by the officer in the Borough Surveyor's Department who was transferred to the Housing Department, not so much attention was devoted to the work of destruction of rats in the sewers after pre-baiting (in other words, the national rat campaign) as was given in 1944 and, so far as the Public Health Department was concerned, the work ceased early in the year.

IV.—HOUSING

Council Houses. The Borough Engineer has supplied the Department with particulars of the present position of the municipal housing schemes :—

Number of Council houses completed during 1945	0
Total number of houses erected for the Corporation up to 31st December, 1945	4,790

Other New Buildings. The following private building operations, plans for which had been approved by the Highways Committee, were carried out during the year :—

Dwellinghouses (private enterprise)	5
Additions or alterations to dwellinghouses	12
Conversion of houses into flats	4
Extensions to hospitals	4
Alterations or extensions to works, etc.	4
Alteration to restaurant	1
Factory canteen	1
Bakery	1
Motor garages	22
Store sheds, etc.	7
Poultry houses	5
Water closets and lavatories	9
Miscellaneous	6
Temporarily licensed buildings	4

Housing Acts. No houses were represented by the Medical Officer of Health under Section 11 of the Housing Act, 1936, as being in such a state as to be unfit for human occupation. Table 7, page 76, gives the condition at the end of 1945 of houses represented during recent years.

No house was repaired under the provisions of Section 9 of the same Act.

The staff made 796 visits of house-to-house inspection under the Housing Consolidated Regulations, 1925 and 1932, and found defects in 489, chiefly want of cleanliness and repairs.

Slum Clearance. Owing to the great demand for houses and the slow rate of production, it does not appear possible to start on slum clearance for some time to come. The problem has become more urgent owing to the inability to get repairs to property effected during the past

six years, so that houses which were scheduled for demolition in pre-war days are now little if anything better than derelicts, yet they must be occupied by their present tenants as there are no houses by which they can be replaced. Though a year has elapsed since the cessation of hostilities in Europe, it is just as difficult to get work done as it was five years ago. I feel very strongly on this subject, but I am powerless to help the people who come to me asking for assistance in the finding of a house.

Public Health Acts. Table 5 (page 74) gives particulars of the work of the sanitary inspectors under these Acts.

Prosecutions. No legal proceedings were necessary to enforce the repair of property, in spite of the fact that work of this description has been for years getting more difficult to carry out owing to shortage of labour and material.

Other prosecutions are mentioned in the paragraphs dealing with the Food and Drugs Act, 1938, on page 32 and Horseflesh on page 30.

Overcrowding. Cases of overcrowding continue to be brought to our notice, but such is the demand for houses that only the most serious ones can be alleviated. Fortunately, most of the complaints come from persons where the overcrowding is only of a minor character, when measured by Government standards. There were thirteen known cases of overcrowding involving 102 persons at the end of 1945.

During the year we received forty-five applications from landlords, agents, etc., to supply the " permitted numbers " for 127 houses.

Sufficiency of Supply of Houses. From information kindly supplied by the Housing Manager it appears the names on the waiting list for Council houses, when the register was revised on 14th November, 1945, reached 3,616, made up as follows :—

In rooms (local)	2,412
In unsuitable houses (local)	618
Applications from outside the Borough	430
Applications from elderly persons for flats with one bedroom	125
Applicants awaiting marriage	6
Applications for Corporation shops	25

Housing Statistics. The particulars for 1945 are set out below in the form required by the Ministry of Health :—

1.—*Inspection of Dwellinghouses.*

(1) Total number of dwellinghouses inspected for housing defects (under Public Health or Housing Acts)	1,382
(2) Number of dwellinghouses (included under sub-head (1) above) inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932	796
(3) Number of dwellinghouses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	0

(4) Number of dwellinghouses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation 852

2.—*Remedy of Defects without Service of Formal Notices.*

Number of defective dwellinghouses rendered fit in consequence of informal action by the Local Authority or their officers 538

3.—*Action under Statutory Powers.*

A.—Proceedings under Sections 9, 10, and 16 of the Housing Act, 1936 :—

(1) Number of dwelling houses inrespect of which notices were served requiring repairs 0

(2) Number of dwellinghouses rendered fit after service of formal notices :—

(*a*) By owners 0

(*b*) By Local Authority in default of owners 0

B.—Proceedings under Public Health Acts :—

(1) Number of dwellinghouses in respect of which notices were served requiring defects to be remedied 317

(2) Number of dwellinghouses in which defects were remedied after service of formal notices :—

(*a*) By owners 314

(*b*) By Local Authority in default of owners 0

C.—Proceedings under Sections 11 and 13 of the Housing Act, 1936 :—

(1) Number of dwellinghouses in respect of which Demolition Orders were made 0

(2) Number of dwellinghouses demolished in pursuance of Demolition Orders 0

D.—Proceedings under Section 12 of the Housing Act, 1936 :—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made 0

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit 0

4.—*Housing Act,* 1936.—*Part IV.—Overcrowding.*

A.—(1) Number of dwellings overcrowded at the end of the year 13

(2) Number of families dwelling therein 13

(3) Number of persons dwelling therein 102*

B.—Number of new cases of overcrowding reported during the year 9

C.—(1) Number of cases of overcrowding relieved during the year 9

(2) Number of persons concerned in such cases 72*

D.—Particulars of any cases in which dwellinghouses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding ..... Nil

E.—Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report ..... †

* Equivalent number of units=88 and 56 respectively.

† *See* paragraph on "Overcrowding" on page 26.

Other Housing Matters. Reference should be made to Section III. "Sanitary Circumstances" for other information bearing on housing.

The estimated number of inhabited houses in the Borough on 31st December, 1945, was 29,400, of which just over 10,000 have been built since 1st January, 1919.

V.—INSPECTION AND SUPERVISION OF FOOD

Milk Supply. At the end of 1945 there were eighty-two milch cows housed in the Borough grouped in the following classes of herds :—

Herds.	Number of Herds.	Number of Cows.
Tuberculin tested	—	—
Accredited	1	12
All other herds	5	70

All the tuberculin tested milk sold in the Town is produced outside the Borough boundary.

The above cattle were periodically examined by the veterinary inspectors of the Animal Health Division, Ministry of Agriculture and Fisheries. I am afraid it will be some time before sufficient inspectors are available to make the examinations as frequently as is desirable.

Milk in Schools. The milk-in-schools scheme, which was enthusiastically taken up in Northampton, shewed some sign of falling off during the year. Local scholars consumed 2,249,388 bottles of milk, against 2,489,865 bottles in 1944. Evacuees took 173,131 bottles of milk (each containing one-third of a pint). Out of the total amount, 144,169 bottles were issued free to children whose parents were not considered to be in a position to pay for them. All the milk is pasteurised as none other is authorised by the School Medical Officer.

Tubercle Bacilli in Milk. The importance of the presence of tubercle bacilli in milk as one of the main causes of non-pulmonary tuberculosis has long been recognised. During 1945, forty-nine samples of raw milk were examined for us at Northampton General Hospital Laboratory for the presence of this bacillus and in only one sample was it found. This coincides very closely with the results of our experience during the previous year, when forty-eight samples were examined with only one positive finding. As the 1945 sample was taken from milk produced outside the Borough, we communicated with the County

Medical Officer, who referred the matter to the Animal Health Division of the Ministry of Agriculture and Fisheries for investigation, which resulted in three animals suffering from tuberculosis of the udder being slaughtered under the Tuberculosis Order, 1938.

The fact that only two samples in nearly a hundred taken in the last two years were found to contain tubercle bacilli speaks well, in my opinion, for the milk supply of Northampton and I again take the opportunity of saying the local officers of the Animal Health Division of the Ministry of Agriculture and Fisheries carry out their duties very efficiently.

Up to the time of writing, the County Borough of Northampton has not been proclaimed an area in which only "heat-treated" milk may be sold. While it is estimated that not less than seventy-five per cent. of the milk sold in Northampton is pasteurised, we cannot yet claim to be one of the seven towns where ninety per cent. or more of the milk sold is heat treated. We hope to reach that stage later.

Dairies, Cowsheds, and Milkshops. At the end of the year, seven cowkeepers, 76 retail dairymen, and seven wholesalers were on the registers. Twelve of these resided outside the Borough ; their premises were inspected by officers of the rural sanitary authorities and passed as fit for the purpose before they were placed on our register. In addition, 126 persons were allowed to sell milk in bottles on conditions explained in previous reports. The inspectors made 435 visits to registered premises, during which minor defects were found in three instances; these were quickly remedied.

Milk (Special Designations) Regulations, 1936 to 1943. The following licences under these Regulations were in operation at the end of 1945 :—

Dealers' licences to use the designation " tuberculin tested " :—	
(*a*) bottling establishments	3
(*b*) shops and other premises	22
Dealers' licences to use the designation " accredited " :—	
(*a*) producing establishment	1
(*b*) bottling establishment	1
Dealers' licences to use the designation " pasteurised " :—	
(*a*) pasteurising establishments	5
(*b*) shops and other premises	10

These licences were held by twenty-eight dairymen in all.

142 samples of milk were taken for bacteriological examination, viz :—twenty-two tuberculin tested, sixty pasteurised, ten sterilised, forty-nine ordinary loose milk, and one ordinary milk in a bottle.

All but three of the twenty-two tuberculin tested milks satisfied the prescribed methylene blue reduction test for cleanliness.

Five of the sixty pasteurised milks failed to comply with the requirements of the Regulations ; the satisfactory samples averaged 13,204 bacteria per millilitre.

Two of the sterilised milks were sterile, one gave an uncountable plate, and the remaining seven an average count of 622 bacteria per millilitre.

Three of the fifty samples of ordinary milk were estimated to contain 500,000 or more bacteria per millilitre ; the average of the remaining forty-seven samples was 81,343, a very creditable figure.

All samples of pasteurised milk were submitted to the phosphatase test to ascertain if pasteurisation had been properly carried out, *i.e.*, if the raw milk had been heated up to a sufficiently high temperature for the requisite period. Fifty-seven of the samples passed the test satisfactorily ; the remaining three failed to do so. All the ten sterilised milks also passed the phosphatase test.

Meat and Other Foods. One officer is specially appointed as Meat and Food Inspector, devoting all his time to the work. Tables 9 and 10 (pages 78 and 79) give particulars of food condemned. Of the 138 tons of food condemned as unfit for human consumption, only three tons (mostly shell-fish) were actually destroyed ; 115 tons were " processed," as explained in my report for 1943, and twenty tons were used for animal feeding stuffs. With the world-wide shortage of food the " processing " of any found to be unfit for human consumption becomes of even greater importance in order to avoid waste.

The Government control of slaughtering, which came into force on 15th January, 1940, continued during the year. The number of animals slaughtered during 1945 was 40,550 in the Government slaughterhouses and 94 on farms, gardens, etc., under " cottagers' " licences. In addition, approximately 180 tons of imported meat passed through the distributing depots each week. The percentage of cows found after slaughter to be suffering from disease to a greater or lesser extent was 65·4 and for other cattle 43·2. Since organotherapy came into such prominence the collection of certain parts of carcases (glands, etc.) has become important.

I am pleased to say that since the cessation of the war in Europe the supply of fish in the Borough has been greatly augmented, not only in quantity but also in quality. The North Sea is shewing the benefit of a long rest.

Disease in Meat. Table 10 (page 79) gives particulars of carcases inspected and condemned. The number of animals slaughtered was 40,644. (*See also* remarks above).

Seizure of Unsound Food. The officers of the Department did not formally seize any meat ; all that was condemned was voluntarily surrendered, a large proportion of it, in fact most of it, after inspection in the abattoir. (*See* Table 9, page 78).

Horseflesh. Proceedings were taken against the keeper of a restaurant for having horseflesh on his premises without displaying a notice to that effect and of supplying horseflesh without its being asked for by customers. Defendant was fined £10.

Slaughterhouses. At the end of the year, there were thirty-five slaughterhouses on the register. These are licensed annually under the Food and Drugs Act, 1938, but, as previously mentioned, only four of them are in use, viz :—Ransome Road, 1A Oliver Street, 8 Regent Square, and Cattlemarket, *i.e.*, those taken over and operated under Government control. The rest are closed and it is my opinion few of them will ever be re-opened.

Public Health (Meat) Regulations, 1924 and 1935. These Regulations, amongst other things, lay upon the owner or slaughterer of animals in an emergency out of hours (accidents, etc.) the onus of giving to the Department notice of the slaughter so that the carcase can be examined by the Meat and Food Inspector. Fifty-seven such notices were received during 1945.

Slaughter of Animals Act, 1933. The names of thirty-nine slaughtermen were on the register at the end of the year.

Grading and Marking of Foodstuffs. The sanitary inspectors continue to carry out the duties imposed by the Merchandise Marks Act, 1926, and the Agricultural Produce (Grading and Marking) Act, 1928, and the numerous Orders made thereunder.

Bakehouses. At the end of the year there were sixty-nine bakehouses on the register. The inspectors paid 171 visits to these premises, when nine minor infringements (chiefly want of whitewashing) were discovered and subsequently remedied.

Other Premises dealing with Food. Under this heading come premises where food is dealt with, other than those already mentioned, *e.g.*, those connected with the manufacture and storage of potted meats, jams, sweets, ice-cream, etc. 2,069 visits were made, when no serious defects were discovered.

Ice-cream. The raising of the ban on the manufacture and sale of ice-cream was followed in Northampton by what one could only describe as a boom in the ice-cream business. Having had some past experience of the bacterial contents of much of the ice-cream on the market and the possible consequences thereof, we took samples for submission to the Bacteriologist, whose report was far from good. Only one of the samples (and that an out-of-town one) could be considered satisfactory ; the others gave plate counts of from 7,000,000 to 17,200,000 per c.c. Coliform organisms were found in all the samples except the out-of-town one. Not only were coliform organisms present, but also fæcal coli. Visits to the premises where the ice-cream was manufactured were paid by the Medical Officer af Health, the Chief Sanitary Inspector, and the Meat and Food Inspector, who instructed the makers in the observance of absolute cleanliness in all departments of the business. A sample of "cold mix" was obtained and submitted to examination, when the Bacteriologist reported the presence of fæcal coli. The matter was then

taken up with the firm who supplied the mix ; they were not the actual manufacturers, having purchased it from the makers, an out-of-town firm. Upon receiving this information we communicated with the Medical Officer of Health of the town where the mix was manufactured. He took action, seized all the mix in stock and had it destroyed. There is no doubt that our efforts, in which we had the cordial co-operation and support of the ice-cream making fraternity in the Borough, greatly improved the bacterial purity of the ice-cream sold in Northampton. Samples taken up to the time of writing shew that one of our difficulties in dealing with the matter lies in the fact that there is no standard of purity for ice-cream. The Public Health Committee, after hearing all the evidence, passed a resolution which was forwarded to the Association of Municipal Corporations calling upon the Ministry of Health to prescribe a standard for ice-cream comparable with that for pasteurised milk. Up to the time of writing no such standard was forthcoming.

Food Poisoning. No case of suspected food poisoning came to the notice of the Department during the year.

Food and Drugs Act, 1938. 296 samples (including 87 informal) were taken by the sanitary inspectors under the Food and Drugs Act, 1938. The nature of the samples submitted to the Public Analyst is given in Table 12 (page 80). Sixteen of them (5·4 per cent.) were found to be not genuine. Three of these were informal samples. Of the thirteen formal samples found to be not genuine, twelve were milks and one was a cake and pudding mixture. They were dealt with as follows :—

Sample No. 1. Milk deficient in milk-fat 9·0 per cent. Case dismissed.

No. 31. Cake and pudding mixture extensively infested with living flour mites. Stock was withdrawn.

No. 52. Milk deficient in milk-fat 15·0 per cent. Vendor fined £2.

No. 78. Milk contained 1·7 per cent. of added water. Warned.

No. 103. Milk deficient in milk-fat 6·3 per cent. Warned.

No. 106. Milk deficient in milk-fat 15·3 per cent. Warned.

No. 107. Milk deficient in milk-fat 9·0 per cent. Warned.

No. 124. Milk deficient in milk-fat 6·0 per cent. Warranty was produced. (*See* No. 126 from wholesaler).

No. 125. Milk deficient in milk-fat 5·3 per cent. Warned.

No. 126. Milk deficient in milk-fat 14·7 per cent. Vendor was fined £3. (*See* No. 124 from retailer).

No. 128. Milk deficient in milk-fat 2·7 per cent. Warned.

No. 209. Milk deficient in milk-fat 15·0 per cent. Case dismissed.

No. 219. Milk contained 2·6 per cent. of added water. Warned.

The average fat content of the 164 samples of genuine milk was 3·51 per cent. and the non-fatty solids 8·85 per cent., both figures being well above the minimum prescribed in the Sale of Milk Regulations, 1939, made under the Food and Drugs Act, 1938.

Preservatives were not detected in any of the milks sent for analysis.

Preservatives, etc. No infringements of the Public Health (Preservatives, etc., in Food) Regulations, 1925 to 1940, came to the notice of the Department during the year.

No action was taken under the Artificial Cream Act, 1929, the Public Health (Condensed Milk) Regulations, 1923 and 1927, the Public Health (Dried Milk) Regulations, 1923 and 1927, or the Public Health (Dried and Condensed Milk) Regulations, 1943.

Chemical Work. No change was made in the arrangements for chemical examinations made on behalf of the Department. This work is carried out by the Public Analyst to the Borough, A. Prideaux Davson, Esq., A.R.C.S., F.R.I.C., F.C.S., Public Analyst's Laboratory, The Public Health Centre, Grange Road, Bermondsey, London, S.E.1.

Bacteriological Work. No change occurred in the arrangements for bacteriological examination of food, which was carried out at the Emergency Public Health Laboratory, Northampton General Hospital.

Samples of milk for the phosphatase test were sent to the Northamptonshire County Council's Laboratory, Guildhall Road.

See also paragraphs on Tubercle Bacilli in Milk, page 28; Milk (Special Designations) Regulations, 1936 to 1943, page 29; Ice-cream, page 31; and Shell-fish on page 33.

Nutrition. That no special work on nutrition is called for in Northampton is shewn by the figures relating to nutrition in school children given in the Annual Report of the School Medical Officer.

Shell-fish and Watercress. In last year's report mention was made of the action taken in dealing with sewage-contaminated shell-fish. It was there stated that mussels arriving in Northampton, which had been relaid and purified at the Lancashire County Council's cleansing station, were found on examination to be free from contamination. On 20th December a sample received from Lancashire and bearing the notice they were " Ribble purified mussels " was found to contain fæcal coli. The matter was taken up with the County Medical Officer, Lancashire County Council, who referred us to the Ministry of Agriculture and Fisheries, Conway, but at the close of the year no satisfactory explanation of the trouble had been reached. The matter was still under consideration at the time of writing owing to another unsatisfactory bacteriological report having been received. In the meantime, all vendors are advising their customers to cook mussels before consumption.

No change was made in the sources or distribution of watercress.

VI.—PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES

" Zymotic Deaths." During 1945, ten deaths were certified as being due to the so-called " zymotic diseases," giving a " zymotic death-rate " of 0·10 per thousand of the civilian population, which is slightly over one-third of the rate for 1944, when 0·27 was recorded largely due to

the outbreak of enteritis (diarrhœa), which for some reason not explained spread over a large part of England and the lowlands of Scotland. The term " zymotic " is an old one signifying some connection with the process of fermentation. At one time the " zymotic death-rate " was looked upon to a greater extent than it is now as an index of the sanitary conditions of a community. The " zymotic deaths " are classified below :—

	NUMBER OF DEATHS.	DEATH-RATES.
Diarrhœa (under two years)	6	0·06
Diphtheria	0	0·00
Enteric Fever	0	0·00
Measles	3	0·03
Scarlet Fever	0	0·00
Smallpox	0	0·00
Whooping Cough	1	0·01

Each disease is dealt with separately in the next few pages.

Measles. We received 1,396 notifications of measles (702 males, 694 females) compared with forty-two during 1944. In other words, the year 1945 was a measles year, though the type could not have been so severe as some of the visitations of this disease in the past, as only three deaths were ascribed to measles, compared with 140 in 1915. The attack-rate for Northampton was 14·17, while for England and Wales it was 11·67. The local death-rate was 0·03 and the national 0·02.

Whooping Cough. Only sixty-four notifications of whooping cough were received during 1945, compared with 371 for the previous year. The disease was confined to children of eight years of age or under. One death was attributed to this disease, giving a death-rate of 0·01, compared with 0·02 for England and Wales. One case was treated in the Borough Infectious Diseases Hospital, Harborough Road.

Diarrhœa and Enteritis. Six Borough children under two years of age were certified as having died from enteritis, giving a rate of 3·4 per thousand live births registered, compared with 5·6 for England and Wales. As previously mentioned, it was the few deaths from enteritis during 1945, compared with those in 1944, which caused the much lower " zymotic death-rate " for 1945.

Influenza. This is not a notifiable disease, consequently our knowledge of its incidence is not very exact, but as only five deaths were certified as due to this cause or where influenza was mentioned on the death certificate, 1945 could not be called an influenza year. Although the disease was not prevalent or mentioned on many death certificates, our attention was frequently called to it or to an impending epidemic which did not arrive. I do not think it is good policy to cry wolf too early or too frequently, but I am strongly in favour of dealing with the wolf effectively as soon as it makes its appearance. As I have said on previous occasions, much that passes for influenza is

nothing more than a common cold (a severe one possibly) but it sounds more impressive to call it influenza. Influenza is not due to bacteria, *i.e.*, " germs " as ordinarily understood, but to a virus, and there is more than one influenza virus.

Cerebro-spinal Fever. Only one notification of cerebro-spinal meningitis was received. The case was treated at the General Hospital and recovered. I have on previous occasions spoken of the slight incidence of this disease during the second world war in comparison with what occurred during the war of 1914-1918, when the number of cases became a serious problem. The change cannot have been due to lack of overcrowding during the late war, as there was probably much less overcrowding thirty years ago.

Enterica. Two cases of enterica (one typhoid, the other paratyphoid B) were notified during 1945, giving an attack-rate of 0·02, the same as for England and Wales. Both our cases were males, one aged ten years, the other fifteen, and both were treated at the General Hospital where they recovered. The source of infection was not traced in either case.

Dysentery. Ten notifications of Sonne dysentery were received, compared with sixty-eight during the previous year. Sonne dysentery is a mild condition compared with the tropical varieties and the number of notifications received gives only a very moderate estimate of its incidence. No deaths were attributed to this disease.

Malaria. One notification of malaria (contracted abroad) was received. He was treated at home and recovered, at least for the time being ; he may (and probably will) suffer from further relapses.

Erysipelas. We received twenty notifications of erysipelas (six males, fourteen females), compared with twenty-two for 1944. The local attack-rate was 0·20, while for England and Wales it was 0·25. One case was treated in the Borough Infectious Diseases Hospital. No deaths were ascribed to erysipelas.

Chickenpox. This disease, which is endemic, is not notifiable in this country, except during the prevalence of smallpox, consequently our knowledge of its incidence is not very exact. Our only information is derived from the weekly returns furnished by head teachers, from which it would appear that 283 cases or suspected cases were reported amongst school children.

Vaccination. The arrangements regarding vaccination in the Borough, which have proved satisfactory in the past, were continued. The three Public Vaccinators are :—

Dr. E. Robertson, 220 Kettering Road ;
Dr. J. Cullen, 5 St. Matthew's Parade ;
Dr. H. F. Percival, 2 Spencer Parade.

These officers cover for vaccination purposes the same areas they serve for medical out-relief. (*See* page 14).

The Medical Officer of St. Edmund's Hospital also acts as Vaccinator.

Mr. F. Taylor and Mr. R. Bennett officiate as Vaccination Officers. From the returns furnished by these two officers it appears that of the 2,615 infants whose births were registered in the Borough during 1944, 476 (18·2 per cent.) were successfully vaccinated. The percentage of Northampton children successfully vaccinated has steadily risen during recent years from the very low figure of 6·1 per cent. in 1933.

During 1945 no vaccinations were performed by the Medical Officer of Health under the Public Health (Smallpox Prevention) Regulations, 1917.

Smallpox. No case of smallpox or suspected smallpox came to the notice of the Department during 1945, in spite of the fact that we received official notice of "contacts" coming into the Borough after disembarkation from the Middle or Far East. These were kept under observation by the district inspectors until the incubation period had expired.

Typhus Fever. No case or suspected case of typhus fever was brought to our notice during 1945. The clothing prescribed by the Ministry of Health to be worn by members of the staff dealing with cases of typhus is still retained at the Borough Infectious Diseases Hospital ready for use in emergency.

Scarlet Fever. 162 notifications of scarlet fever were received, compared with 171 in 1944. Sixty-five related to males and ninety-seven to females. The local attack-rate was 1·64, while that for England and Wales was 1·89. Eighty-nine cases were treated at the Borough Infectious Diseases Hospital where twenty were found after a period of observation to be not suffering from scarlet fever. The disease remained of the same mild nature as that prevalent in the country for so many years. The explanation of the mild type, as compared with the more virulent form so common about the end of last century, is not forthcoming. It may be due to a less virulent strain of streptococcus, or, on the other hand, it may result from greater resistance on the part of the individual, *i.e.*, an increase in the protective power of the blood; in other words, a certain degree of immunity, which is what one tries to achieve in the case of diphtheria by two suitably spaced injections of antigen. There were no deaths from scarlet fever.

Diphtheria. Only twenty-five notifications of diphtheria were received by the Department during 1945, compared with thirty-four for 1944, forty-seven in 1943, eighty-three in 1942, and 334 for the year 1941. Twenty-one of the notifications related to females and only four to males—a considerable disproportion. The local attack-rate was 0·25; for England and Wales it was 0·46. Twenty-two cases were

treated at Harborough Road Hospital, where none was found to be of a severe type. There were no deaths from diphtheria in the Borough, consequently the local death-rate from this disease was 0·00; for England and Wales it was 0·02.

Ninety-five phials of antitoxin (each of 8,000 units) were supplied free to general practitioners in the Borough on application to the Public Health Office at a cost of about £21.

The types of diphtheria prevalent in this area, as determined by the Bacteriologist at the Emergency Public Health Laboratory at Northampton General Hospital, during the year were :—28·0 per cent. *gravis*, 17·5 per cent. *intermedius*, 51·5 per cent. *mitis*, 3·0 per cent. atypical. From these figures it will be seen that a little over half the strains examined were of a type which seldom gives rise to fatal cases.

Immunisation against Diphtheria. The number of school children aged five to fifteen years who received two injections (0·2 and 0·5 c.c.) of the prophylactic (A.P.T.) according to the Ministry of Health's specifications during 1945 was 264 and of those under five years, who come within the scope of the Maternity and Child Welfare Committee, was 1,134, making a total of 1,398 who completed the course. It is strongly advised that all children who have been immunised under the Maternity and Child Welfare Committee's scheme should receive a third injection of 0·5 c.c. A.P.T. as a " booster " on entering school.

At the end of 1945, by means of a census taken in schools on 21st November, 1945, it was estimated that 76·2 per cent. of school children, and by a census taken on 17th November by health visitors it was estimated that 46·1 per cent. of children under five, had received two injections of A.P.T. From this it will be seen that the under fives still lag behind with regard to immunisation in spite of the encouragement given and the facilities offered.

Fifty-eight phials of A.P.T. (each of 5 c.c.) were supplied free to practitioners in connection with immunisation.

Pneumonia. 106 notifications of pneumonia were received, compared with 124 for 1944 and 145 in 1943. The local attack-rate was 1·08, while the corresponding rate for England and Wales was 0·87. The ages of the patients varied considerably ; the youngest was aged two months while the oldest was eighty-three years. The classification of the pneumonias was :—broncho-pneumonia 23, influenzal pneumonia 9, all other forms or the type not specifically stated 74. Fourteen cases were treated at the General Hospital and one at St. Edmund's Hospital. Forty-one deaths were ascribed to pneumonia, viz:—influenzal 3, broncho-pneumonia 27, other forms 11, giving a local death-rate from this cause of 0·42.

Borough Hospitals. Infectious Diseases Hospital, Harborough Road. A full description of this hospital of eighty-five beds, allowing 144 square feet per bed, appeared in my report for 1930 and any alterations made subsequently have been noted in my annual reports.

Table 11 (page 79) gives statistics for 1945. The hospital was never half full during the year in spite of our admitting military cases from a wide area. The highest number of patients under treatment at any given time was twenty-five on 29th December at the commencement of an outbreak of diphtheria which ran on into 1946, while the lowest was one on 4th August, 1945. The average number of patients was 12·1. (*See also* pages 13 and 14).

TUBERCULOSIS HOSPITAL, WELFORD ROAD. Particulars of this hospital were given in my report for 1930. Further references occur on pages 13 and 54 of this report.

SMALLPOX HOSPITAL, MERE WAY. No work was carried out at the Smallpox Hospital (which is a very good hospital of its type) beyond keeping it in such a state as to be available for opening at short notice. (*See also* pages 13 and 14).

ST. EDMUND'S HOSPITAL, WELLINGBOROUGH ROAD. At this hospital, which is under the control of the Public Assistance Committee, no additions or alterations of any importance were made. (*See also* page 13).

Puerperal Pyrexia. Seventy-nine notifications of puerperal pyrexia were received, compared with eighty-six in 1944. Forty-one of these related to out-of-town cases not notified in their own areas. The attack-rate per thousand total births was 43·24, compared with 9·93 for England and Wales. Three cases were treated at home, six at St. Edmund's Hospital, and seventy at the General Hospital. Of the thirty-eight Borough cases, four occurred in the practices of midwives, fifteen were general practitioners' cases; the remaining nineteen occurred in institutions.

Ophthalmia Neonatorum. No cases of ophthalmia neonatorum were notified. Thanks to preventive measures, this disease, which was the cause of so much blindness in the past, is not the scourge it was at the beginning of the present century.

Venereal Diseases. 270 Borough residents received treatment for the first time at the Special Clinic for venereal diseases held at Northampton General Hospital, under the combined scheme worked in conjunction with the County Councils of Northamptonshire and Buckinghamshire. The classification of the new cases was as follows :—

CONDITION.	MALES.	FEMALES.	TOTAL.
Syphilis	32	27	59*
Gonorrhœa	52	8	60
Other than Venereal	73	78	151
Totals	157	113	270

(*Twenty-six male and ten female syphilis cases were of more than one year's standing).

Three syphilis (one male and two female) and twenty-two gonorrhœa (ten male and twelve female) patients, including persons under treatment at the commencement of the year, carried out full courses of treatment recommended by the specialists in charge of the Clinic and were discharged after the final test of cure.

Seven gonorrhœa patients (five males and two females) ceased attending before completion of treatment or before final tests of cure were made. After twenty years experience of the Clinic, I give it as my opinion it is only the personal interest in the patients shewn by the staff of the Clinic and the trust and confidence the patients have in them which keeps the defaulters within such small limits.

The total attendances made by Borough patients at the out-patient clinics were 2,203, compared with 3,182 in 1944. Eighty-one days were spent in hospital by patients. In the treatment of syphilis, 682 doses of approved arsenobenzene compounds (stabilarsan or sulfarsenol) were administered, as also were 910 doses of other preparations, making a total of 1,592. I am pleased to say that so far as is known no case of infective hepatitis, sometimes (though erroneously) called arsenical jaundice, followed any of these injections.

In connection with the scheme, 1,936 specimens were examined by the Pathologist at a cost of £444 16s. 0d.; 1,024 specimens were on behalf of the Treatment Centre, 736 for hospitals and other institutions, and 176 for local practitioners.

The times at which the clinics are held at Northampton General Hospital remain the same as last year, viz :—

Males—Wednesday, 2 p.m.; Friday, 7 p.m.

Females—Monday, 7 p.m.; Friday, 12 noon.

The Clinic remains under the medical direction of W. M. Robson, Esq., M.D., F.R.C.P.

No action under Defence Regulation 33B was taken during the year. At the same time I might mention there has been a considerable falling off in the number of Forms I. received during the past twelve months.

Cancer. In my last report I said that the Council of Northampton County Borough had joined with the Berks, Bucks and Oxon Regional Hospitals Council in the formulation of a scheme for the treatment of cancer, as called upon so to do by the Cancer Act of 1939. After much deliberation and work a scheme applicable to the whole area covered by the Regional Hospitals Council was drawn up and submitted to the different authorities in the area during March, 1946, before submission to the Minister of Health for his approval. What will be the ultimate fate of the scheme it is not possible to say at present, as so much depends upon the New Health Bill, which in turn involves the future of the hospitals. One feature I notice in the National Health Service Bill is the proposed linking of the provincial hospitals with the teaching hospitals and I mentioned in my report last year that for cancer treatment Northampton General Hospital would be linked with the Radcliffe Infirmary, Oxford, and thus with Oxford University.

The number of cancer deaths in Northampton during 1945 was 188, giving a local death-rate from this cause of 1·91 ; for England and Wales it was 1·95. Table 3 (page 72) gives comparable figures for the last ten years.

Prevention of Blindness. The information required by the Ministry of Health will be found under the heading " Blind Persons " on page 19.

In last year's report I mentioned that much of the blindness in the past was due to infection at birth by Neisser's organism and that by preventive measures at birth much blindness had been prevented. It is satisfactory to know that during the past year no case of ophthalmia neonatorum was notified to the Department, shewing how well these preventive measures were carried out.

Tuberculosis. The report of the Clinical Tuberculosis Officer, Dr. N. B. Laughton, the twenty-seventh in the series, is printed as Appendix I. on pages 47 to 61.

One hundred and six new cases of pulmonary tuberculosis and eighteen of other forms were entered on the register of the Medical Officer of Health, making a total of 124.

The total tuberculosis death-rate for Northampton was 0·72 (respiratory 0·62 ; other forms 0·10). The corresponding figure for England and Wales was 0·62 (respiratory 0·52 ; other forms 0·10). The war in Europe having ceased over twelve months ago, it is interesting to see the effect it had on the Borough tuberculosis death-rate. There is something definite about death which is missing in the mere notification of the disease. The rates for the last ten years are given in Table T6 on page 59 and we may assume that, if the war really had any effect on the rate, that effect will be continued for another few years, because the effects of tuberculosis are not like those of bubonic plague, where the fatal issue is reached in a matter of a few days at most.

I wish to reiterate the statement I made many years ago, viz :— that there is no evidence of any undue incidence of tuberculosis associated with the boot and shoe industry. This is substantiated by the tuberculosis death-rates for England and Wales and Northampton for the ten-year period 1936 to 1945. It will be seen from Table T6 on page 59 that the rates for Northampton, with its population heavily weighted by boot and shoe operatives, are almost precisely the same as those for England and Wales.

The big event in the Tuberculosis Department was the introduction of mass radiography, which was used for the first time on 29th October, 1945. As mentioned in my report for 1944, the old Fire Station in Dychurch Lane was adapted for use as a mass radiography centre and a very efficient one it proved to be with its necessary auxiliary departments for photography, doctor's consulting room, office, etc. It was felt that during the first session in the Borough the staff should devote the whole of their time to the examination of those employed in factories. Arrangements were made by the organising secretary and the manage-

ments of the selected factories by which batches of forty examinees were brought down to the Centre in buses supplied by the Corporation Transport Department. All the arrangements worked very satisfactorily. At the end of the session, when the time had arrived for the Unit to return to the County area, 14,530 persons had been examined, which was considered to be a very satisfactory result. The last photographs were taken on 5th March, 1946, when the Unit finally closed down. It is expected that it will return to the Borough in the late autumn, when arrangements will be made for the examination of employees of any outstanding factories and possibly other persons not employed in factories who wish to be examined. The Unit during its first visit to the Borough was under the medical directorship of Dr. M. C. Brough, with Miss E. M. van Zeller as organising secretary, who will later issue a full account of the work accomplished during the session. The senior radiologist was Mr. J. Birley.

Bacteriology. No change was made in the arrangements for carrying out the bacteriological work connected with the Department, all of which, with the exception of water analysis, was performed at the Emergency Public Health Laboratory at Northampton General Hospital. Table 13 (page 81) gives particulars of clinical bacteriology.

Disinfection and Disinfestation. The number of articles dealt with at the Disinfecting Station, St. Andrew's Road, was 3,328. A new firebox was fitted to the boiler of the disinfector by the makers in December, 1945.

Scabies. The arrangements for the treatment of scabies at Miller's Meadow Slipper Baths, St. Andrew's Road, continued throughout the year. In addition to school children under the Education Committee's scheme, 239 Borough patients were treated, comprising 74 males and 165 females. Under the arrangement with Northampton Rural District Council, 43 persons were also treated during the year. The total attendances were 690, compared with 988 for 1944. The same treatment, viz :— benzyl benzoate, which was found to be so successful in the past, was continued throughout the year. We seem to be making some impression on the disease, which is not nearly so prevalent as it was a few years ago.

VII.—MATERNITY AND CHILD WELFARE

General Remarks. The twenty-fifth annual report of the Assistant Medical Officer for Maternity and Child Welfare on the work of that Department will be found in Appendix II. on pages 62 to 71.

There were no changes in staff during the year, apart from the addition of one part-time clerk (Mrs. R. E. Chown), who commenced duties on 9th April.

Infant Mortality. The infantile mortality-rate of 40·3, while not the lowest recorded for the Borough, is nevertheless a low one for an

industrial town. The corresponding rate for England and Wales was 46 and for the great towns 54. While one of the most outstanding achievements in public health in this country during the past fifty years has been the fall in the infant death-rate, this should not lull us into a state of complacency, or into thinking that the irreducible minimum has been reached and nothing more remains to be done. If other countries can reduce their infantile death-rate to well below forty (and keep it there), can there be any reason why we should not do the same, given suitable facilities ? As I have pointed out in previous reports, much of the problem turns on the prevention of premature births and reducing the neo-natal deaths. Some steps in this direction have already been taken, as mentioned in my last year's report.

Maternal Mortality. No Borough mother died through childbirth or from conditions associated with childbirth during 1945, consequently the local death-rate from this cause was 0·00, compared with 1·79 for England and Wales. It will be seen from Table M7 on page 71 that only twice during the last ten years has the maternal death-rate for the Borough been above that for England and Wales On three occasions during that period we did not record a single maternal death, surely a tribute to all who were, and are still, responsible for the midwifery service in the Borough.

Toddlers. The child welfare scheme caters for children up to the age of five years (those of ages one to five being designated " toddlers ") through the agency of health visitors and special clinics known as " centres," where consultations can be had with the medical officer or the health visitors on duty, as considered necessary. These centres are very popular with the mothers, some of whom make long journeys in order to receive advice. It is hoped that in time more up-to-date centres will be established in the outlying districts of the Borough, St. James' for instance. At the time of writing several of the premises which in pre-war times were used as centres, but requisitioned by the military during the war, have been derequisitioned but not redecorated and rendered fit for our use.

Midwives Act, 1936. The means adopted in Northampton for implementing the provisions of this Act were explained in former reports. The arrangements continue to work to the satisfaction of all parties concerned, viz :—the Ministry of Health, the Town Council, and the Queen's Institute of District Nursing. The shortage of midwives, which is acute throughout the country, has not to my knowledge led to any untoward circumstances in the Borough. It is my opinion the shortage will continue for a considerable time.

Institutional Provision for Mothers and Children. At the end of 1945 the number of nursing homes registered in the Borough remained the same as in the previous year, *i.e.*, five classified as follows :— one is a mixed home for medical, surgical, and maternity cases ; two are

registered for maternity only ; one (St. Saviour's Home) is for mothers and babies ; and one is registered for the admission of aged and infirm persons. (*See also* page 15). The increase in the number of births taking place in the Town during recent years, together with the shortage of staff, both nursing and domestic, has thrown extra strain on these institutions, but so far they have all been able to surmount their difficulties without detriment to the patients.

In my last report I spoke of the pressing call for maternity beds in the Borough leading to the discharge of mothers and babies from St. Edmund's Hospital at the end of ten days instead of the customary fourteen, which practice has had to be continued on and off ever since, and I am pleased to say it has not been followed by any ill-effects. Only mothers who were quite fit have so far been discharged at the end of the shorter period. It is hoped these measures will tide us over until the additional beds at the Barratt Home, Northampton General Hospital, are ready for the reception of maternity cases, but up to date (June, 1946) work on the building has not commenced, although the plans and estimates have been approved by the County and Borough Councils.

Health Visitors. The number of health visitors employed by the Maternity Committee at the end of the year was eight, all solely engaged in maternity and child welfare work, not giving part-time to tuberculosis visiting or school work as is the case in some towns. The " clinics " of one kind or another which have sprung up in recent years (ante-natal, post-natal, immunisation against diphtheria and whooping cough, sunlight clinics, etc.) have encroached considerably on the work of the health visitors, so much so that the visits paid to expectant mothers, children under one year, and to " toddlers " do not reach the number recorded a few years ago. I look upon the visitation of the homes as a matter of primary importance, but I see no way of increasing the number of home visits without the employment of more health visitors, unless we can get help from outside, though with the all-round shortage of nurses one cannot feel very hopeful. (*See* list of health visitors on page 8 and paragraph on " Home Visitation" on page 63).

Child Life Protection. The health visitors, acting as child protection visitors, reported on their visits to persons undertaking the care of children for gain or reward. For statistics *see* page 67.

Dental and Orthopædic Treatment. The arrangements made some years ago, and outlined in previous reports, by which expectant and nursing mothers and pre-school children can receive dental treatment at the School Clinic in King Street, has continued to function in spite of the fact that we have only had one school dentist during 1945. The amount of work done for mothers and children is given in Table M6 on page 71.

Any child found at the " centres " to require orthopædic treatment is referred to the out-patient department of Manfield Hospital, situate

in Hazelwood Road, where its parents can obtain the advice of the orthopædic specialist.

(*See also* paragraphs on pages 66 and 64).

Otorrhœa. Pre-school children suffering from otorrhœa (discharging ears) continue to receive treatment for this troublesome complaint at the School Clinic through an arrangement with the Education Committee. In my opinion it is necessary that the discharge should have ceased, *i.e.*, the ear should have been dry, for ten days before the child is discharged as cured. Unfortunately, several weeks may elapse before this result is obtained. Five cases made fourteen attendances during the year.

Milk for Mothers and Children. The National Milk Scheme continued to work satisfactorily during the year and no case of a mother or baby suffering from a shortage of milk was brought to the notice of the Department. (*See also* paragraph on Milk on page 67).

Priority Dockets for Sheets. Under the Board of Trade scheme priority dockets for sheets were issued by the Infant Welfare Department to 255 expectant mothers who fell within the specified conditions. (*See* page 68).

Fruit Juices and Cod Liver Oil. The issue of these vitamin supplements to expectant mothers and to children under five years of age continued from the Food Office, Fish Street, where the arrangements worked satisfactorily.

Evacuation Scheme for Expectant Mothers. Though the danger arising from enemy bombs and rockets ended with the cessation of hostilities on the Continent, parties of expectant mothers continued to arrive from London every Friday up to the end of the year owing to the shortage of maternity accommodation in the metropolitan area. These parties were seen at the Infant Welfare Centre, St. Giles' Street, by the Assistant Medical Officer (Dr. M. M. Williams) before being dispatched to hostels or billets under the control of the Chief Education Officer in his capacity as Chief Billeting Officer. Though the parties consisted of nominally fourteen to twenty, it was rare for the full quota to arrive. Actually 562 women came during 1945, all destined for confinement at St. John's Emergency Maternity Home, Weston Favell.

The scheme ceased on 18th January, 1946, and from the outbreak of war to that date 4,005 women had arrived in weekly parties and 472 unofficial mothers registered with the Maternity Department, making a total of 4,477. Nearly all the women returned to London fourteen days after delivery.

The members of the Voluntary Committee continued to give their valuable help with the reception of these expectant mothers at St. Giles' Street Centre and I take this opportunity of tendering my thanks for the splendid assistance they gave us for nearly seven strenuous years.

During the year, 878 women (including 599 evacuees) were delivered at St. John's Home and 534 in St. Edmund's Hospital.

(*See also* pages 20 and 67).

Voluntary Workers. The Voluntary Committee continued to give their valuable and much appreciated help to supplement the work of the whole-time staff of the Department, especially at the weekly "centres." Some of these ladies have given help during two world wars and during the intervening years when they had the opportunity of seeing the work grow from somewhat small beginnings and, what is perhaps more satisfactory still, they have witnessed the splendid results of their efforts. I am sure nobody can pay a visit to one of these afternoon centres without being very favourably impressed by the splendid mothers and children seen there—the pick of Northampton. As this is the last annual report I shall write as Medical Officer of Health, I welcome the chance of thanking the members of the Voluntary Committee who have assisted at these centres during the trying years of war and, in fact, during the twenty years I have been the Chief Medical Officer of the Borough. Without their help the infant welfare movement could not have been the decided success it has been in Northampton. An account of the activities of the voluntary workers is included in the report of the Assistant Medical Officer for Maternity and Child Welfare on page 64.

Wartime Day Nurseries. The six wartime day nurseries which were still functioning as such at the end of the year, together with the dates of opening, are set out below :—

NAME.	SITE.	DATE OF OPENING.
Bush Hill	Weston Favell School Grounds	8-6-42
Victoria Park	Victoria Park	22-6-42
Kingsthorpe Park	Kingsthorpe Park	29-6-42
Wallace Road	Kingsley School Grounds	13-7-42
Delapre	Far Cotton Recreation Ground	26-10-42
Spencer	Gladstone Road	27-7-44

These nurseries were described in former reports and they continued to function satisfactorily during the year. There cannot be any doubt in the minds of persons who visited the nurseries from time to time that they were a success (though possibly an expensive one). They provided a safe means by which mothers could go out to work during the war period, always knowing that their little ones would be well cared for and made happy. As one of those visitors I can testify to the way the children progressed, also as to their happiness after they once settled down. Of course, one requires the right type of woman to manage such places and I think we were fortunate in our choice. As to the nurseries being a means of spreading infectious disease, which some persons feared, I do not think there was so much danger in it as there was thought to be.

Home Helps. The home help scheme does not seem to be popular in Northampton. For some years we have been trying to run one, but without success. Though the terms offered were good there were very few applicants and any suitable ones who agreed to take up the work soon resigned. Some applicants did not even present themselves for an interview. No ! such work is not popular in Northampton, where there are so many other outlets. At the time of writing we have one home help on trial.

Administration of Analgesics. At the end of the year, thirteen midwives in the Borough held a certificate of competence in the use of the Minnitt gas-air analgesic apparatus. These were either employed in institutions or were in the service of the Queen's Institute of District Nursing, who conduct the domiciliary midwifery on behalf of the Borough Council by agreement under the Midwives Act, 1936.

See Appendix III. (page 72) for the usual statistical tables in connection with the Medical Officer of Health's report.

Appendix I. (page 47) deals with the work of the Tuberculosis Department and Appendix II. (page 62) with the Maternity and Child Welfare Department.

APPENDIX I.

REPORT OF THE CLINICAL TUBERCULOSIS OFFICER FOR THE YEAR 1945

Health Clinic,
11 St. Matthew's Parade,
Northampton.
June, 1946.

To the Medical Officer of Health and Chief Tuberculosis Officer.

Sir,

I beg to submit my report on the anti-tuberculosis scheme for the year 1945.

Your obedient Servant,
N. B. LAUGHTON

Notifications. During the year, 124 persons were notified as suffering from tuberculosis. Of these, 106 were pulmonary and 18 non-pulmonary. Their disposal and age-groups are shewn in Tables T8 and T9 (page 61). In addition, 9 cases already notified in other areas came into the Borough. The number of notifications shews a decrease of 30 on that of the previous year.

Deaths. The number of deaths and the death-rates from tuberculosis per thousand of the population in 1945 were as follow :—

	NO. OF DEATHS.	DEATH-RATES.
Respiratory Tuberculosis	61	0·62
Other Forms	10	0·10
Totals	71	0·72

The death-rate for all forms for England and Wales in 1945 was 0·62 (respiratory 0·52, other forms 0·10).

Table T6 on page 59 gives the total tuberculosis death-rates for Northampton and for England and Wales during the last ten years.

Revision of Register. Under the Public Health (Tuberculosis) Regulations, 1930, the names of seventeen notified persons were removed from the register in 1945, these consisting of :—

(*a*) Six in whom the diagnosis had not been established and
(*b*) Eleven where the patient might be regarded as having recovered.

Particulars of the cases were submitted to the Medical Officer of Health, who decided whether they were suitable for deletion and, if so, under which heading.

On 31st December, 1945, there were 754 names on the Medical Officer of Health's register, 566 relating to pulmonary and 188 to non-pulmonary patients.

The number on the register of the Health Clinic on that date was 650.

The Services. During 1945, nineteen men and three women from this area were discharged from the Services suffering from tuberculosis. In twenty of these the disease was pulmonary. In most of them the disease had advanced considerably beyond the early stage.

Thirty-seven recruits, thirty-six men and one woman, were examined at the request of the National Service Medical Boards.

X-ray Examinations. The number of radiological examinations has shewn a bigger yearly increase than usual, due chiefly to more investigations for the purpose of diagnosis. 2,820 screen, and 882 photographic, examinations were carried out, a total of 3,702.

Artificial Pneumothorax. This form of collapse therapy takes a prominent place in treatment, and after patients leave hospital or sanatorium it is continued at the Health Clinic. Fifty-nine patients were treated, induction and refills numbering 1,215. This represents 9 per cent. of those under treatment or supervision at the Clinic. A full collapse, or nearly so, was obtained in over half the cases, and a moderately good but effective result in all but three of the remainder. Treatment was discontinued in nine instances. A satisfactory termination was reached in four of these, three were brought to an end by progressive obliteration of the pleural space, and two moved to other areas. At the end of the year, 27 (46 per cent.) were fit for remunerative work (or housework in the case of some women) and 32 (54 per cent.), of whom eight were still in hospital, were unfit for employment. It is interesting to note the extent of disease existing when the patients were treated : 36 per cent. were early, 54 per cent. had reached an intermediate stage, and 10 per cent. were advanced. In 32 the sputum, originally positive (*i.e.*, containing tubercle bacilli) became negative or disappeared altogether, in seven tubercle bacilli continued to be present, in five a negative sputum remained so, and in fifteen there was no sputum at any time.

Extra Nourishment. During the year 120 grants of extra nourishment were made by the Public Health Committee. This consisted of milk and, in some cases, also oil and malt. Fifty-one patients received this benefit.

Park Workers. At the beginning of 1945 five men were employed on light duties under this scheme. One was taken off work owing to illness and two were added, making a total of six at the end of the year.

Housing. The importance of good housing in the prevention of tuberculosis needs no emphasis. The housing shortage has added considerably to the difficulty of securing good, hygienic accommodation and isolation, especially where new cases have arisen in bad homes, but the Housing Committee has willingly given every assistance possible in this respect. In December, 1945, the number of tuberculous persons living in Council houses was 241. Needless to say the whole household benefits owing to a reduction in the risk of infection.

Care Work. The continued and increasing activity of this work, administered by the Care Committee, is proving of great value in the anti-tuberculosis campaign. The sum of £106 was obtained from the proceeds of a Flag Day and the Christmas Seal Sale realised £376. The Chairman's special Christmas appeal brought in £46. There was the usual £150 grant from the Borough Council and funds were augmented by voluntary donations. The money has gone to the assistance of patients and their families in providing clothing, bedding, footwear, extra nourishment, medical comforts, and domestic assistance. A special report on the Care Committee's work has been issued by the Honorary Secretary, Miss I. M. Chick.

Almoner's Department. Work in the department continues to increase and there is evident a growing appreciation of this service. It is essentially medico-social, dealing with those aspects of the patient's background which might prevent him benefiting as he should from treatment, or which might lead to relapse. Help is given in re-adjustment to changed circumstances resulting from illness, and to the problems of re-establishment in social and working life (*see* paragraph on " Rehabilitation " below). The unit of all care work is the household, not the patient alone, and the Almoner's approach is made on a personal basis. One of her chief duties has been the assessment and adjustment of allowances under the Government and Borough schemes. Rehabilitation, under the Disabled Persons (Employment) Act, 1944, is demanding increasing attention, and mass miniature radiography provides further opportunities for help. The Almoner also takes a big share in the work administered by the Care Committee. She visits patients in hospital as well as in their homes, takes a practical interest in occupational therapy, arranges for transport of patients to and from other areas, and works in close co-operation with various statutory and voluntary agencies from whom assistance of any kind can be obtained. During the past year the Almoner's interviews at the Clinic numbered 718 and home visits 518.

Mass Miniature Radiography. This commenced in the Borough in 1945. After a preliminary period in March, during which small groups from both County and Borough were X-rayed, the radiography of factory workers commenced on October 29th and continued for the following 4½ months. At the end of the year under review the work was progressing smoothly and satisfactorily. As it takes some months to assess the findings, due chiefly to the fact that a considerable number require observation before a final diagnosis can be arrived at, it is too soon to make

any definite statement on the results, but so far they seem comparable with those elsewhere. A noteworthy feature has been that active tuberculosis tends to predominate in the younger age-groups in women (15 to 40) and the older age-groups in men (35 to 65).

Rehabilitation. The Disabled Persons (Employment) Act, 1944, administered by the Ministry of Labour, provides for the full or part-time employment of disabled persons and, when considered advisable, for their training. Tuberculous persons come within its scope. There has always been in past years, for obvious reasons, difficulty in securing for them work of a suitable kind and this fact in itself has often reacted detrimentally in the matter of early notification, adequate treatment, and proper aftercare. With the backing of the new Act and the co-operation of the Ministry of Labour, an attempt was made in 1945 to make good this serious defect. The names of persons suitable for work, light or part-time in most cases, were submitted to the Ministry for the personal consideration of the Disablement Rehabilitation Officers. At the same time an assurance was given as to there being no risk to co-workers. This has been only a beginning, with results comparatively small so far owing to the limited application of the Act as yet. It is hoped, however, that with the sympathetic co-operation of the Ministry of Labour, employers and employees alike, restitution to working life can be arranged for patients on a growing scale, so that their recovery may not be clouded as hitherto by the fear of inevitable unemployment and ostracism.

Tuberculosis Allowances. GOVERNMENT SCHEME. This came into operation on 1st November, 1943. The Northampton Corporation, along with a few other authorities, provided later a scheme on similar lines for those ineligible under the Government plan. They run side by side, but from the patients' point of view there is no distinction between one and the other. Allowances are granted under three headings :— (1) Maintenance, (2) Discretionary, and (3) Special Payments. The amount granted is disappointing in some instances, but the combined scheme has worked satisfactorily and been accepted gratefully. Assessment and investigations are carried out by the Almoner and payment is made by the Borough Treasurer.

Below is given a summary of the allowances provided in 1945. The number of grants exceeds the number of patients benefiting, as Discretionary, in addition to Maintenance, Allowances are made where there are heavy commitments. Again, several patients entitled to Special Payments while in sanatoria have qualified for Maintenance Allowances on discharge. The number of grants, the cost, and the number of those who have benefited are as follow :—

ALLOWANCES.	NUMBER.	COST. £	s.	d.
Maintenance	92	3,158	6	10
Discretionary	12	93	8	6
Special Payments	8	45	5	0
Total Allowances	112	3,297	0	4

Number of patients benefiting—98

Of the ninety-two patients receiving Maintenance Allowances, seventeen became fit for work during the year, seven were transferred to the Borough scheme on medical grounds, four without dependants ceased to qualify on admission to sanatorium, three married, three left the Borough, three died, three were deleted from the register, and one was transferred to the Public Assistance Committee. At the end of the year, therefore, fifty-one patients were still in receipt of Maintenance Allowances. Eighteen of these had been referred to the Clinic by the Mass Radiography Unit.

Borough Scheme. This came into operation at the beginning of April, 1944, and like the Government scheme is subject to satisfactory co-operation on the part of those receiving grants. There is good reason to believe this supplementary scheme most helpful and economically fruitful.

The number of grants, the cost, and the number of recipients during the year are given below :—

ALLOWANCES.	NUMBER.	COST. £	s.	d.
Maintenance	65	3,503	6	6
Discretionary	6	42	9	4
Special Payments	12	156	15	0
Total Allowances	83	3,702	10	10

Number of patients benefiting—77.

Twenty-two of the patients ceased to draw Maintenance Allowances during the year. Nineteen of these died, one was transferred to the Government scheme, one started work and one was admitted to a sanatorium. Four patients receiving Special Payments died and in two cases grants were discontinued as they were no longer required.

It will be noted that the combined Government and Corporation schemes cost (within a few shillings) seven thousand pounds.

The Tuberculosis Service. It took the war to bring into being long-needed reforms in the tuberculosis service, and with them a more hopeful outlook for all concerned. Memorandum 266/T., with its threefold scheme for mass miniature radiography, rehabilitation and the provision of allowances, heralded a definite advance in the right direction, despite certain limitations that made the step faltering. One is led to consider how we stand with regard to this forward movement and how it can be applied to the best advantage in furthering the prevention and eradication of the disease.

At the present time lack of bed accommodation is evidenced by waiting lists in all parts of the country. As long ago as 1920 Sir P. C. Varrier-Jones, of Papworth, pointed out that there existed 70,000 sputum-positive cases and only 30,000 beds, and the position is probably no better to-day. It has been made worse the past few years by shortage

of nursing staff (sometimes necessitating the closing of wards) and the fact that sanatorium work is considered less attractive than other branches of nursing. A sputum-positive person at home is a potential source of infection, and the danger bears some relation to the opportunities for repeated infection. Those intimately exposed to it develop lung tuberculosis more often than those not exposed. Children are especially susceptible. Housing of the tuberculous, therefore, be it in a sanatorium or in other good environment, should have a high priority in the interests of the community.

A recent report by a special committee of the Joint Tuberculosis Council endorsed the view, already expressed by others competent to judge, that there should be an absolute minimum of three beds per two deaths in the year. Our present accommodation falls a little short of this ratio. The figure does not take account, however, of the requirements of mass radiography. The Medical Research Council, basing its views on surveys elsewhere, suggests that this would entail an additional need of three to four beds per thousand radiographed. It depends to some extent on home conditions prevailing in particular areas, and how far domiciliary observation and treatment can be carried out. From the short experience here one has the impression that additional beds will not be required to the full extent indicated by the Medical Research Council.

Accommodation of another kind is called for, namely, for children—those notifiable because of definite but mild, non-infectious lesions, and others, less ill, where notification is unnecessary. The latter may be those exposed to infection in a tuberculous household and for whom temporary removal to a good environment is desirable. The observation of child contacts is time profitably spent at the Health Clinic if the means exist for helping those who need it. The younger the child the higher the risk and the mortality. Tuberculous disease in children is dependent on both degree of contact and duration of contact. Intimate relationship of a child with an infectious adult should be broken. The first infection is, for any person, a dangerous corner ; for a child it is a very dangerous corner indeed. War conditions increased the danger. Much has been done in the past in France, and by a few authorities in this country, by the boarding out of contacts (the Grancher system). An alternative, and a better solution under present conditions, is the establishment of well-run convalescent homes for children.

A matter that seems due for reconsideration is the official attitude which stresses the confidential aspect of the notification of tuberculosis. In general it seems to have been emphasised more than ever in connection with mass radiography. It is difficult to see any real advantage in advocating this secrecy, and certainly it can produce difficulties and even lead to evasion. To maintain the false stigma of tuberculosis by a hush-hush approach in these days is both unreasonable and unfair. It is misleading to imply that if trouble be found it should be kept as a skeleton in the cupboard. From a practical standpoint, of course, this cannot be done if a patient is going to carry out treatment properly

either at home or in a sanatorium. Psychologically, it is harmful. Surely the time has come to regard the disease in the same manner as one would any other infectious condition, such as diphtheria.

In conclusion, one must stress the fact that tuberculosis is an index of national health. Immunity is not absolute for anyone ; it can be breached by conditions of poverty, ill-health caused by disease or by physical or mental overstrain, bad housing and overcrowding, malnutrition, squalor. The breach can be widened by ignorance and fear. Social betterment is the basis of prevention, but along with this must go education and enlightenment in good living.

Health Clinic. Work at the Health Clinic has increased year by year, and 1945 was no exception. Carrying out the provisions of the Ministry of Health Memorandum 266/T. added considerable work in a new field, though the effect of mass miniature radiography only began to be felt in the last month of the year. An event of major importance was the transfer of the Health Clinic from 2 Hazelwood Road to 11 St. Matthew's Parade in July, for the old premises had become so inadequate for present-day work that a breaking-point seemed near at hand. The new Clinic makes for more efficient work by the staff, and means a better deal for the patients. Dr. N. O'Leary assisted on two days a week throughout the year. The services of a part-time nurse were lost on the resignation of Nurse M. Garvey, who, owing to nursing shortage, has not yet been replaced.

Data with regard to work in the Clinic (apart from that in the Almoner's department which has already been given) are given below :—

Attendances (including contacts, etc.) :—		
Total number		3,837
Patients attending :—		
Males	760	
Females	712	
		1,472
Average number of attendances per patient		2·6
Contacts :—		
Total number of examinations		409
Individuals examined		235
Of these, five were subsequently notified.		
Recruits (from National Service Medical Boards)		37
Examinations for diagnosis :—		
Total number of examinations		1,045
Individuals examined		702
68 of these were found to have active tuberculosis.		
Visits by Tuberculosis Officer to patients and their homes		192
Consultations :—		
Personal	19	
Other	1,177	
		1,196

Tuberculosis Visitor. Visits made by the Tuberculosis Nurse were as follow :—

Investigation in cases of :—		
Pulmonary tuberculosis	114	
Other forms	19	
Deaths	8	
		141
Re-visits and other investigations		697
Total		838

In addition to these investigations, the Tuberculosis Nurse attended at all clinics and assisted in the carrying out of special treatment (*e.g.*, artificial pneumothorax).

LABORATORY EXAMINATIONS. Specimens for examination (including those from Welford Road Hospital) were investigated at the Emergency Public Health Laboratory at Northampton General Hospital. Data with regard to these are given below :—

Cases investigated		643
Results of examination for tubercle bacilli in sputum, urine, pleural effusions, pus, etc. :—		
Positive	152	
Negative	691	
		843
Guinea-pig inoculations		17

Of these, two gave a positive result.

X-RAY EXAMINATIONS :—		
Films	882	
Screenings	2,820	
		3,702
ARTIFICIAL PNEUMOTHORAX (Clinic and Hospital) :—		
Refills		1,215
Patients treated		59

(*See* page 48).

Welford Road Hospital. During 1945, seventy-one patients were treated in the hospital and the average number of beds occupied daily was 25·7. Treatment is based on the fundamental principles of physical and mental rest (especially in the early stages) under healthy open-air conditions, with an ample and nutritious diet. Artificial pneumothorax is used where likely to be beneficial and the results have been satisfactory. Emphasis is laid on instruction to patients with respect to the disease, as this has proved of the greatest value in the prevention of relapse.

At the time of writing the position concerning nursing and domestic personnel is as bad as ever, and with so small a staff one is threatened from time to time with the collapse of the most essential needs of the hospital service. There seems little likelihood of much improvement while tuberculosis nursing is on a voluntary basis and until there is a

surplus of staff for the larger sanatoria where the amenities are so much better. Welford Road Hospital has always had the additional handicap of unsatisfactory living quarters for nurses and domestics.

The same applies to ward accommodation, in buildings not designed for the purpose they have served for thirty years. Reference has been made above to the need for additional beds, and X-ray facilities should be provided for the control of treatment, especially in the early stages of artificial pneumothorax therapy.

All nurses and domestics are now X-rayed and tuberculin-tested on appointment and photographed thereafter at intervals of not more than six months.

One of the difficulties in sanatorium life is how to spend long hours of enforced leisure. For those who are sufficiently well there are games such as croquet, bowls, billiards, and darts. For the less fortunate who are still confined to bed, the problem can often be relieved by light handicraft work of a suitable kind. We have been fortunate in the voluntary help and instruction so ably given by Mrs. Rush. It is hoped to increase the library as books become available. Much reading matter has been provided by friends. The Entertainment Committee (a sub-committee of the Care Committee) has helped to make patients healthier and happier by arranging for concerts at intervals throughout the year.

A summary is given below of particulars respecting the treatment of patients at Welford Road Hospital:—

	Males.	Females.	Total.
Remaining at end of 1944	10	13	23
Admitted	24	24	48
Treated	34	37	71
Discharged	16	18	34
Died	8	5	13
Remaining at end of 1945	10	14	24

Condition of patients on discharge:—

Quiescent	2
Much improved	18
Improved	12
No material improvement	1
Worse	1

Average number of days in hospital (excluding those under one month)	232 (over 7½ months)
Average gain in weight	16 pounds
Highest weight gained	68 pounds
Ages of patients	15 to 56 years

Result of sputum examinations for tubercle bacilli:—

Admitted with sputum T.B.+	24
Number of these discharged with T.B.+	11
Number of these discharged with T.B.— or no sputum	13
Admitted with sputum T.B.— or no sputum	10
Number of these discharged with T.B.— or no sputum	10
Number of these discharged with sputum T.B.+	—

Artifical pneumothorax treatment :—

Patients treated in hospital	11
Number of inductions and refills	212

Creaton Sanatorium. Below are the data with reference to the patients treated at Creaton Sanatorium in 1945 :—

	Males.	Females.	Total.
Remaining at end of 1944	12	7	19
Admitted	29	18	47
Treated	41	25	66
Discharged	26	11	37
Died	1	2	3
Remaining at end of 1945	14	12	26

Condition of patients on discharge :—

Quiescent	3
Much improved	5
Improved	20
No material improvement	8
Worse	1

Manfield Orthopædic Hospital. Particulars of cases treated at Manfield Orthopædic Hospital and Shipman Convalescent Home are as follow :—

	Males.	Females.	Total.
Remaining at end of 1944	3	1	4
Admitted	6	2	8
Treated	9	3	12
Discharged	3	2	5
Died	1	—	1
Remaining at end of 1945	5	1	6

Condition of patients on discharge :—

Arrested	1
Quiescent	2
Improved	2

Other Institutions. Eight patients were maintained in institutions outside this area. Two were sent to the National Children's Sanatorium, Harpenden, one to the Children's Sanatorium, Holt, one to the Royal National Orthopædic Hospital, Brockley Hill, one to the Treloar Hospital, Alton, two to the Victoria Home for Children, Windsor, and one to Morden House, Guilden Morden, Herts.

Tuberculosis Regulations, 1925. It was not necessary to take any action under the Public Health (Prevention of Tuberculosis) Regulations, 1925, which relate to persons suffering from pulmonary tuberculosis employed in the milk trade.

Public Health Act, 1936. There was no case of compulsory removal to hospital, under Section 172 of the Public Health Act, 1936, of persons suffering from tuberculosis.

Table T1. Northampton, 1945.

Tuberculosis. Classification of New Cases.

CLASSIFICATION.	NOTIFIED CASES.			DEATHS OF CASES NOT NOTIFIED.		
	M.	F.	TOTAL.	M.	F.	TOTAL.
Pulmonary :—						
Lung and Pleura	63	43	106	5	2	7
Larynx	—	—	—	1	—	1
	63	43	106*	6	2	8*
Meninges and Brain	—	—	—	2	—	2
Peritoneum and Intestines	—	—	—	—	—	—
Bones and Joints	6	2	8	—	—	—
Cervical Glands	5	3	8	—	—	—
Other Organs	1	1	2	—	1	1
Totals	75	49	124	8	3	11

* A total of 114 fresh cases of pulmonary tuberculosis.

Table T2. Northampton, 1945.

Pulmonary Tuberculosis Investigations. Duration of Illness.

PERIOD.	NOTIFIED CASES.	DEATHS OF CASES NOT NOTIFIED.	TOTALS.
Under 6 months	43	3	46
Over 6 months and under 1 year	13	—	13
Over 1 year and under 2 years ..	11	—	11
Over 2 years and under 3 years	9	—	9
Over 3 years and under 4 years	1	1	2
Over 4 years and under 5 years	2	—	2
Over 5 years	7	1	8
Unascertained	20	3	23
Totals	106	8	114

Table T3. Northampton, 1945.

Pulmonary Tuberculosis Investigations. Sex and State.

	MALES.	FEMALES.	TOTALS.
Single	25	28	53
Married	39	15	54
Widowed	2	2	4
Unascertained	3	—	3
Totals	69	45	114

Table T4. Northampton, 1945.

Pulmonary Tuberculosis Investigations. Degree of Home Isolation Found.

	MALES.	FEMALES.	TOTALS.
Number having separate Bedrooms	19	15	34
Number having separate Beds only	3	5	8
Number having no Isolation	26	17	43
Number in Institutions	16	6	22
Unascertained	5	2	7
Totals	69	45	114

Table T5. Northampton, 1945.

Tuberculosis Deaths. Period elapsing between Notification and Death.

Period between Notification and Death.	Males.	Females.	Totals.
Pulmonary Tuberculosis :—			
Not notified	5	—	5
One month	4	1	5
1—6 months	5	2	7
6—12 months	6	2	8
12—18 months	2	3	5
18—24 months	1	2	3
2—3 years	6	—	6
3—4 years	1	3	4
4—5 years	1	3	4
5 years and over	9	5	14
Totals	40	21	61
Tuberculosis other than Pulmonary :—			
Not notified	2	2	4
One month	1	—	1
1—6 months	2	—	2
18–24 months	1	—	1
3–4 years	—	1	1
Over 5 years	—	1	1
Totals	6	4	10

See also footnote to Table T9.

Table T6. England and Wales and Northampton, 1936-1945.

Total Tuberculosis Death-rates in Each Year of the Decennium.

	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
England and Wales	0·69	0·69	0·63	0·64	0·70	0·73	0·66	0·67	0·62	0·62
Northampton	0·64	0·72	0·84	0·44	0·66	0·76	0·59	0·65	0·65	0·72

Table T7. Northampton, 1945.

Pulmonary Tuberculosis. Occupational Incidence and Mortality.

OCCUPATION.	New Cases.	Deaths Registered	OCCUPATION.	New Cases.	Deaths Registered
Shoe Operatives :—			Insurance Agent	1	1
(*a*) Clicker	2	1			
(*b*) Laster	2	—	Labourer	6	5
(*c*) Finisher	6	5	Leather Dresser	1	1
(*d*) Roughstuff and Pressman	4	—	Leather Traveller ..	1	—
			Lorry Driver	1	2
(*e*) Warehouse and General	9	3	Motor Mechanic	—	1
(*f*) Female Worker	14	4	Munition Worker ..	2	—
	37	13	Newsagent	1	1
			Nurse	2	—
Brewer's Drayman ..	1	—			
Bricklayer	1	—	Painter	1	—
			Park Attendant	—	1
Carpenter	1	—	Plumber	1	—
Cinema Manager (Assistant)	1	—	Police Constable	—	1
			Publican	—	1
Clerk	8	—			
Coach Builder	1	—	School Child	3	—
Coach Trimmer	—	1	Sewerman	—	1
Company Director ..	1	—	Shop Assistant	2	1
Electrical Engineer ..	2	1	Tool Setter	1	2
Egg Packer	1	—	Toymaker	—	1
Ex-Army	8	1			
Ex-Marine	1	—	Waitress	1	—
Ex-Navy	3	—	Warehouseman	1	1
Ex-R.A.F.	3	—	Window Cleaner	—	1
Ex-W.A.A.F.	2	—	Wireless Engineer ..	—	1
Ex-W.R.N.S.	2	—	Works Superintendent	1	—
Fire Watcher	—	1			
Flax Worker	2	—	No Occupation	3	7
Grocer	—	1	Not Ascertained ..	1	—
Hotel Waiter	1	1			
Housewife	8	13	Totals	114	61

TABLE T8. NORTHAMPTON, 1945.

PULMONARY TUBERCULOSIS. DISPOSAL OF NOTIFIED CASES.

CLASSIFICATION.	NUMBER.	PER CENT.
Received Residential Treatment at :—		
Welford Road Hospital 24		
Creaton Sanatorium 33	58	55·4
Other Institutions 1		
Refused Residential Treatment	11	10·3
Residential Treatment not considered necessary	26	24·4
Too ill for removal	6	5·5
Died before receipt of notification	3	2·7
Left the Area	2	1·7
Totals	106	100·0

TABLE T9. NORTHAMPTON, 1945.

TUBERCULOSIS. AGE GROUPS FOR NEW CASES AND DEATHS.

AGE PERIODS.	NEW CASES.				DEATHS.			
	PULMONARY.		NON-PULMONARY.		PULMONARY.		NON-PULMONARY.	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year	—	—	2	—	—	—	1	—
1–5 years	—	—	2	—	—	—	1	—
5–10 years ..	—	—	2	1	—	—	2	—
10–15 years ..	1	1	2	2	—	—	1	—
15–20 years ..	9	11	1	—	3	1	—	1
20–25 years ..	6	16	—	1	1	6	—	1
25–35 years ..	10	8	1	1	3	7	—	1
35–45 years ..	15	7	4	—	10	5	1	1
45–55 years ..	12	2	—	2	10	1	—	—
55–65 years ..	12	—	—	—	7	—	—	—
65 and upwards	4	—	—	—	6	1	—	—
Totals	69	45	14	7	40	21	6	4

Five (8·2 per cent.) of the sixty-one deaths from tuberculosis of the respiratory system and four (40·0 per cent.) of the ten deaths from other forms of tuberculosis were of cases not notified. Reference should also be made to Table T5.

See also remarks of Medical Officer of Health on page 40.

APPENDIX II.

REPORT OF THE ASSISTANT MEDICAL OFFICER FOR MATERNITY AND CHILD WELFARE FOR THE YEAR 1945

To the Medical Officer of Health.

Sir,

I beg to submit herewith my report on the maternity and child welfare work in the Borough for the year 1945.

Your obedient Servant,

M. MARTIN WILLIAMS

INFANT WELFARE CENTRE,
DYCHURCH LANE, NORTHAMPTON.
JUNE, 1946.

Staff. The permanent staff of the Department consists of one Assistant Medical Officer, eight health visitors, and two clerks. Their time is wholly devoted to work connected with maternity and child welfare.

Mrs. R. E. Chown was appointed as a part-time clerk from 9th April.

Infant Mortality. The number of infant deaths was seventy-two, twenty-four less than in 1944. The infant mortality-rate was 40·3 per thousand live births registered, which is 5·7 below that for England and Wales (*see* Table M1, page 69).

Premature birth accounted for the greatest number of these infant deaths; twenty infants died owing to prematurity, compared with twenty-eight in 1944. Forty-one died during the first month of life; of this number nineteen were premature.

The infant deaths are classified by cause in Table M2 (page 69) and in more detail according to cause and age in Table D at the end of this volume.

Notification of Births. The birth-rate for 1945 was 18·1, compared with 16·1 for England and Wales.

1,788 live births and thirty-nine stillbirths were registered. 2,362 live births and sixty-seven stillbirths were notified, making a total of 2,429 (*see* Table M3, page 69). Table M4 shews the sources of notification.

1,644 births were investigated by the health visitors; seventeen of these were non-notified. They also visited thirty-one other births but no information was available. The remaining births occurred either in larger houses, or the mothers, resident outside the Borough, came into the Town for their confinements and returned home later.

776 babies (including stillborn babies) were born of primiparæ.

Special attention was paid to premature babies and the circumstances of 130 were investigated during 1945.

In addition to these figures, the health visitors investigated sixty-six evacuee births which occurred at St. John's Hospital and were afterwards billeted in the Borough, the majority of them in the hostel at 9 Park Avenue and a few in private billets.

Stillbirths. The number of stillbirths notified was sixty-seven, eighteen less than in 1944. Twenty-seven of the sixty-seven were County cases and three were evacuees, born and notified in the Borough. The remaining thirty-seven stillbirths were investigated. Twenty-three of these occurred in primigravida. In thirteen cases labour was premature, two were postmature, and one was illegitimate.

Causes of stillbirth :—

Maternal		4
Toxæmia	3	
Toxæmia and ante-partum hæmorrhage	1	
Fœtal		8
Anencephaly	2	
Hydramnios	3	
Hydrocephalus	2	
Ascites and other abnormalities	1	
Cause unknown		11
		(4 premature)
Fœtus fresh	3	
Macerated	8	
Accidents of labour		14
Born before arrival	1	
Transverse	1	
Cord round neck	3	
Prolapsed cord	1	
Impacted breech	5	
Obstructed labour—rigid os	1	
Forceps	1	
Ante-partum hæmorrhage (concealed and revealed)	1	

Home Visitation.

Visits to Expectant Mothers :—	
First Visits	227
Total Visits	386
Visits to Children under One Year of Age :—	
First Visits	1,726
Total Visits	6,118
Visits to Children from One to Five Years of Age :—	
Total Visits	5,060

The health visitors paid 12,493 visits during 1945. This number includes all the visits enumerated above and also extra visits, viz :— to houses where a baby under one year had died and to all cases of puerperal pyrexia, pneumonia, etc., in women and children.

Ultra-violet Ray Treatment. Ultra-violet ray treatment was continued with the usual exception of the summer months. 160 children under five years of age received 2,468 treatments. By arrangement with the Education Committee sixty-nine school children also received 1,015 treatments. These children were chiefly suffering from rickets and marasmus and most of them benefited from the treatment.

Manfield Orthopædic Hospital. Four beds are maintained, when occupied, at Manfield Hospital. At the beginning of January two patients were under treatment. During the year four were admitted to the hospital suffering from general orthopædic conditions. One patient was taken over by the Education Committee on reaching five years of age, one was taken over by the Northamptonshire County Council from 11th March, her parents having removed to that area, and three were discharged, the average length of stay being twelve days. One case was still under treatment at the close of the year.

Welfare Centres—Statistics. There was a decrease in the number of children under one year of age who attended at the centres for the first time and also in their number of attendances. There was an increase in the number of attendances of children from one to five years.

Table M5 (page 70) gives the average attendances and consultations at the fifteen centres in the Town. The total average attendance of mothers per week was 740, against 851 in 1944, of babies and toddlers 816, against 911 in 1944.

The attendances at all centres during the year were :—

(*a*) By Children under One Year of Age	24,786
(*b*) By Children between the Ages of One and Five Years	11,877

The attendance of children per session at all centres during 1945 averaged 54. In 1944 the figure was 61.

The number of children who attended at the centres for the first time during the year was :—

(*a*) Children under One Year of Age	1,364
(*b*) Children between the Ages of One and Five Years ..	93

The number of children who were in attendance at the centres at the end of the year was :—

(*a*) Children under One Year of Age	1,042
(*b*) Children between the Ages of One and Five Years ..	1,405

Voluntary Work. The Northampton Maternity and Infant Welfare Voluntary Association reports a successful year's work for 1945, as will be seen from the following report supplied by the Association :—

" The Voluntary Association reports a satisfactory, if uneventful, year in 1945. There are now fifteen infant welfare centres ; the attendance statistics are on the whole satisfactory and the leaders and helpers carry on their share of the work with unfailing patience and energy. Owing to the difficulty of obtaining materials for needlework and

cookery, the usual mothercraft competitions were not held. In their place it was hoped to arrange a course of classes and lectures in cookery at the centres with the object of helping the mothers to make the best use of the available rations, the course to be followed by an exhibition of cookery by the mothers. As a preliminary, Miss S. M. Weeks, Superintendent Health Visitor, gave a series of talks on food values at the centre. Unfortunately, owing to the impossibility of obtaining lecturers, the course had to be abandoned, but it is hoped early in 1946 to arrange a course of lectures and demonstrations at the College of Technology.

At the Annual Meeting in June, Professor Winifred Cullis gave a most interesting address on " The Importance of Early Factors in the Health of the Community." Professor Cullis gave a graphic account of the discovery of vitamins, their importance and their respective functions. National savings groups have again been successfully carried on in most of the centres. The sale of stamps from January to December, 1945, amounted to £2,256 13s. 0d.

Members of the Association assisted, as in other years, with the reception of the evacuee expectant mothers and, when the evacuation to Northampton was discontinued, were gratified to receive a letter of thanks from the Borough Council.

The Committee of the Association wishes once more to place on record its sincere thanks to Dr. M. Martin Williams for her unfailing interest in its work, for her active assistance, and for her wise guidance and advice. The Committee would also thank Miss Weeks and the health visitors for their help and co-operation."

Maternity Homes. There are five nursing homes in the Town, three of which may admit maternity cases only. One (St. Matthew's Nursing Home) is registered for maternity, medical, and surgical cases. Twenty-seven visits of inspection were paid to the nursing homes by the Assistant Medical Officer.

The Local Authority maintains no maternity home. An arrangement is in operation whereby expectant mothers, who are abnormal cases and are found to require institutional treatment at the time of confinement, are treated in the Barratt Maternity Home. 120 cases (including two evacuees) were admitted during 1945. Normal and necessitous cases go to St. Edmund's Hospital. 514 women were admitted during 1945.

Midwives. Fifty-two midwives notified their intention to practise. The Queen's Institute of District Nursing employed eighteen of these at different times and thirteen were attached to St. Edmund's Hospital. The Inspector of Midwives paid eighteen visits to midwives practising independently, for the purposes of inspection. She also paid seven visits of inspection to the Queen's Institute of District Nursing. Medical aid was summoned by a midwife under Section 14 (1) of the Midwives Act, 1918, on 239 occasions.

The Queen's nurses attended 453 cases as maternity nurses or midwives during 1945.

Ante-natal Work. The Council provides and maintains one ante-natal clinic (four sessions per week) at St. Giles' Street Centre. In addition an ante-natal clinic is held at the Queen's Institute of District Nursing, Kingsthorpe Road. 191 sessions were held at St. Giles' Street Clinic and were attended by 1,009 Borough cases (including 202 still attending from 1944) and four evacuees. 5,431 attendances were made by Borough patients and four by evacuee expectant mothers.

Forty-five cases were referred to the Consultant Obstetrician, eighteen of whom were admitted to Barratt Maternity Home.

At the Queen's Institute of District Nursing 772 attendances were made by 317 expectant mothers in eighty-two sessions.

656 patients who attended the Borough clinic (1944–45) had babies born in 1945.

Doctors and midwives usually send their patients to the ante-natal clinic by appointment and in each case a report is forwarded to the doctor or midwife concerned.

In cases of sudden emergency the Consultant Obstetrician may be called in by a local practitioner ; seven cases in this category were dealt with during 1945.

Post-natal Work. A post-natal clinic is held once a week. Forty-three sessions were held during 1945 and were attended by 336 Borough women (including four still attending from 1944) and two evacuees. 438 attendances were made by Borough patients and two by evacuees.

A post-natal clinic is also held at the Queen's Institute of District Nursing. There were thirteen sessions during 1945 attended by 129 women, each making one attendance.

Doctors' Bills. In certain circumstances the Maternity and Child Welfare Committee undertakes the payment of doctors' and midwives' bills. A revised scale was adopted in April, 1942, fixing the proportion to be recovered from patients according to their means. Instalments and any outstanding debts in connection with these bills are collected by a member of the staff of the Borough Treasurer's Department.

Dental Treatment. As in previous years, children under school age and pregnant and nursing mothers may be treated by the School Dental Officer. Two sessions each week are set apart for this work. Payment for treatment is made to the Dental Clinic direct, or later by instalments at the Borough Treasurer's Department.

Bills amounting to over £93 were sent to thirty-six patients. Just over £128 was collected on these accounts and those outstanding from previous years. £19 was collected in small fees for which no bills were issued. Table M6 (page 71) shews the numbers dealt with and the form of treatment.

The following is extracted from the Dental Officer's report :—

" It will be noted that thirty-six sessions less have been allocated for this work than in 1944. This was due to the loss of the Assistant Dental Officer in January, who at the time of writing has not been

replaced. The amount of treatment carried out, although down on 1944, was still considerably in advance of the years before 1941. It is hoped, however, that another dental officer will soon be appointed in order that this very important work shall not suffer."

Milk. The National Milk Scheme is conducted by the Milk Officer at the Food Office.

Dried milk is sold at St. Giles' Street Centre : the following tabulation shews the number of pounds sold :—

" Cow and Gate " full cream	5,167
" Cow and Gate " humanised and half cream	1,113
" Trufood "	1,181

24,331 pounds of dried milk were also sold at the welfare centres, through the Voluntary Association.

Puerperal Pyrexia. Seventy-nine cases of puerperal pyrexia, including forty-one non-residents, were notified. Seventy were treated at Northampton General Hospital, six at St. Edmund's Hospital, and three at home.

Maternal Deaths. No maternal death occurred during 1945.

Ophthalmia Neonatorum. No cases of ophthalmia were notified.

Diarrhœa and Enteritis. Six babies under the age of two years died from diarrhœa and enteritis.

Child Life Protection. The Maternity and Child Welfare Department administers Sections 206 to 220 of the Public Health Act, 1936, relating to foster-children. These children are supervised until they reach the age of nine years. The number of persons on the register receiving children for reward at the end of the year was thirty-two ; these had charge of fifty-one children. It was not necessary to obtain any legal order or to take any proceedings under the Act during 1945.

Three persons gave notice during 1945 under Section 7 (3) of the Adoption of Children (Regulation) Act, 1939.

Evacuation Scheme. Regular parties of expectant mothers arrived in Northampton and were received at St. Giles' Street Centre. During the year, 562 arrived, all of whom were for confinement at St. John's Hospital. These parties ceased to come after 18th January, 1946. Between 1st and 18th January, 1946, thirty-three mothers arrived. Ante-natal care was provided at the County Health Department, and women who remained in the Town after their confinement attended the Borough infant welfare centres.

At the beginning of 1945 there were three ante-natal hostels in the Borough. These had accommodation for eighteen, fifteen, and thirteen respectively. During the year they admitted 171, 153, and 149 mothers. The post-natal hostel provided accommodation for fourteen mothers and babies. Sixty-two were admitted during the year and, in addition, seventy-seven expectant mothers were also accommodated at this

hostel. From 1st January, 1946, to 23rd February, when these hostels were closed, twenty-one, thirteen, two, and eight expectant mothers respectively were admitted. Regular visits were paid to these institutions by the Assistant Medical Officer.

Wartime Nurseries. There were six day nurseries in the following areas :—Bush Hill, Victoria Park, Kingsthorpe Park, Wallace Road (Kingsley), Delapre, and Spencer. These had accommodation for 250 children under five years of age whose mothers were engaged on war work or other work of national importance.

On 31st December there were 281 children attending these nurseries, ninety-three of whom were under two years of age.

207 visits (including fifteen medical inspections) were paid to the nurseries by the Assistant Medical Officer and, in addition, all children were medically inspected before admission.

Eleven visits (including three medical inspections) were also paid to the Dallington Nursery Home.

Daily Guardians Scheme. This scheme, whereby children under five years of age are cared for by registered daily guardians while their mothers are engaged on war work or other work of national importance, is supervised by the Maternity and Child Welfare Department in collaboration with the Ministry of Labour. At the end of the year forty women had charge of forty children.

Diphtheria Immunisation. 1,094 children completed the full course during the year. Of this number eighty-nine were attending the wartime nurseries. It was estimated that by the end of the year 46·1 per cent. of children under five years of age in the Borough had been immunised.

Prophylactic Whooping Cough Vaccine. During the year 135 children completed the full course.

Priority Dockets for Sheets. Expectant mothers who are being confined at home may obtain priority sheets. During the year dockets were issued to 255 applicants.

Home Help Scheme. At the beginning of 1945 one home help was employed. Unfortunately, owing to domestic reasons, she resigned in February. Her services had been very reliable. Despite repeated advertisements no further help was obtained. One part-time helper has given very satisfactory service. Six cases were attended during the year.

It is hoped that with the release of women from industry some may be attracted to this type of work. For the success of this scheme it is essential that the right type of woman should be employed. It requires tact and reliability as well as housecraft.

Table M1. England and Wales and Northampton, 1936–1945.

Infant Mortality in Each Year of the Decennium.

	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
England and Wales	59	58	53	50	55	59	49	49	46	46
Northampton	39·9	47·6	46·6	41·7	49·0	52·9	42·6	39·2	46·3	40·3

Table M2. Northampton, 1941–1945.

Infant Mortality. Causes of Death*.

CAUSES OF DEATH.	1941	1942	1943	1944	1945
Atrophy, Debility, and Marasmus	7	5	2	1	—
Bronchitis and Pneumonia	20	10	10	21	16
Congenital Malformations	15	12	6	10	9
Convulsions	2	1	2	1	1
Diarrhœa, Enteritis, and Gastritis	—	3	4	17	6
Measles	1	—	—	—	2
Premature Birth	22	23	29	28	20
Tuberculous Diseases	—	—	—	1	1
Whooping Cough	2	—	—	3	—
All Other Causes	22	14	16	14	17
Total Deaths	91	68	69	96	72
Total Live Births	1720†	1597	1761	2074	1788
Infant Mortality	52·9	42·6	39·2	46·3	40·3

See also Table D at end of Report.

†This figure was supplied by the Registrar-General for the special purpose of calculating infant and maternal mortality.

Table M3. Northampton, 1945.

Live Births and Stillbirths Registered and Notified.

	MALES.	FEMALES.	TOTALS.
Number of Live Births Registered	932	856	1788
Number of Stillbirths Registered	18	21	39
Total Number of Births Notified	1254	1175	2429
Number of Live Births Notified	1221	1141	2362
Number of Stillbirths Notified	33	34	67

Table M4. Northampton, 1945.

Notification of Births. Sources of Notification.

	NUMBER.	PER CENT.
Medical Practitioners	93*	3·8
Certified Midwives	2331	96·0
Parents and Others	5	0·2
Totals	2429	100·0

*Includes 75 also notified by Midwives.

Table M5. Northampton, 1945.

Maternity and Infant Welfare Centres. Statistics.

CENTRE.	DAY OF MEETING.	AVERAGE ATTENDANCE PER WEEK.				Average Number seen by Doctor per Session.
		Mothers (incl. Expectant Mothers).	Babies.	Toddlers.	Total Babies and Toddlers.	
Abington Avenue ..	Thursday ..	61	42	27	69	18
Broadmead	Monday	51	36	22	58	19
Broadmead	Friday	57	42	23	65	15
Doddridge Memorial	Tuesday	71	55	21	76	19
Doddridge Memorial	Thursday ..	25	21	5	26	15
Far Cotton	Monday	52	34	22	56	19
Kingsley Park	Monday	56	41	20	61	15
Kingsthorpe	Tuesday	49	39	10	49	24
Kingsthorpe	Friday	30	26	9	35	20
St. Edmund's	Friday	62	39	31	70	19
St. Giles' Street ..	Wednesday ..	57	39	28	67	21
St. Giles' Street ..	Thursday ..	46	35	16	51	19
St. Sepulchre's	Wednesday ..	60	42	25	67	20
St. Sepulchre's	Friday	34	30	5	35	15
Victoria Road	Tuesday	29	28	3	31	13
	Totals	740	549	267	816	271

Table M6. Northampton, 1945.

Summary of Dental Operations.

NATURE OF OPERATION, ETC.	MOTHERS.	CHILDREN.	TOTALS.
Patients seen	156	179	335
Patients treated	127	133	260
Number of attendances	688	361	1049
Teeth extracted	319	142	461
Administrations of local anæsthetic	154	98	252
Fillings	66	—	66
Teeth treated with nitrate of silver	6	596	602
Scalings	40	—	40
Repairs	2	—	2
Dentures	58	—	58
Completed	31	109	140
Other operations (dressings, etc.)	291	38	329

Table M7. England and Wales and Northampton, 1936–1945.

Maternal Mortality* in Each Year of the Decennium.

	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
England and Wales ..	3·65	3·11	2·97	2·82	2·61	2·77	2·47	2·29	1·93	1·79
Northampton	3·20	1·60	—	—	2·06	1·13	4·27	3·30	0·94	—

*Calculated per 1,000 total (live and still) births registered and including deaths from abortion.

See also Section VII. of Medical Officer of Health's report (pages 41 to 46).

APPENDIX III.

STATISTICAL TABLES

TABLE 1. ENGLAND AND WALES AND NORTHAMPTON, 1936–1945.

BIRTH-RATES IN EACH YEAR OF THE DECENNIUM.

	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
England and Wales ..	14·8	14·9	15·1	15·0	14·6	14·2	15·8	16·5	17·6	16·1
Northampton	12·5	12·4	12·5	12·3	11·9	11·8	15·7	17·9	20·7	18·1

TABLE 2. ENGLAND AND WALES AND NORTHAMPTON, 1936–1945.

DEATH-RATES IN EACH YEAR OF THE DECENNIUM.

	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
England and Wales ..	12·1	12·4	11·6	12·1	14·3	12·9	11·6	12·1	11·6	11·4
Northampton	12·6	12·6	11·1	11·6	13·9	12·8	11·5	13·1	12·2	12·9

TABLE 3. ENGLAND AND WALES AND NORTHAMPTON, 1936-1945.

CANCER DEATH-RATES IN EACH YEAR OF THE DECENNIUM.

	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
England and Wales ..	1·63	1·63	1·67	1·67	1·72	1·78	1·83	1·90	1·90	1·95
Northampton	1·74	1·86	1·63	1·34	1·61	1·78	1·83	2·04	1·73	1·91

Table 4. Northampton, 1945. Meteorological Data.

Month.	Rainfall.				Temperature.						Direction of Wind.				Bright Sunshine.*	
	Total inches.	Greatest in 24 hours. Depth.	Greatest in 24 hours. Date.	Days on which 0·01 in. or more fell.	Mean.	Maximum. Deg.	Maximum. Date.	Minimum. Deg.	Minimum. Date.	No. of Nights at or below 32 deg. F.	SW. Quadrant including W. Days.	SE. Quadrant including S. Days.	NE. Quadrant including E. Days.	NW. Quadrant including N. Days.	Hrs.	Mins.
January ..	2·19	0·80	29	19	33·52	48·0	18 31	17·5	26	21	6	1	7	17		
February	1·50	0·42	11	12	45·39	60·0	18	31·0	10 23	3	20	2	1	5		
March	0·95	0·36	19	8	47·71	67·0	23	28·0	2	4	11	3	3	14		
April	1·01	0·23	1	12	51·35	76·5	16	30·0	29	4	5	8	4	13		
May	2·04	0·55	5	16	57·17	80·0	12	33·0	1	0	17	5	5	4		
June	2·46	0·65	21	21	61·98	81·0	19	41·0	1	0	18	3	1	8		
July	2·06	1·15	14/15	14	64·52	85·5	14	49·5	2	0	13	3	3	12		
August ..	1·79	0·31	21	14	62·47	86·0	4	46·0	1	0	5	4	10	12		
September	2·61	0·80	3	17	60·40	73·0	12	43·0	24	0	12	5	5	8		
October ..	3·49	0·75	23	12	53·37	69·0	10	37·0	14	0	16	4	5	6		
November	0·44	0·06	4 13 21	12	49·93	57·5	3	31·0	26	3	4	11	6	9		
December	2·83	0·65	27	19	40·70	64·0	2 16	26·0	18	9	11	10	1	9		
Year 1945	23·37	1·15	July 14/15	176	52·38	86·0	Aug. 4	17·5	Jan. 26	44	138	59	51	117		

*Sunshine records not available locally for 1945.

Table 5. Northampton, 1945.

Summary of Routine Work of the Sanitary Inspectors.

	Number of Inspections, etc.	No. at which Nuisances, Defects, etc., were Found.
1.—Total Number of Inspections and Visits	16251	
2.—Number of Premises at which Nuisances were Found		1002
3.—Total Number of Houses Inspected	1382	852
4.—Number of these Houses Repaired		660
5.—Number of these Houses Cleansed and Whitewashed		462
6.—Number of Houses Cleansed after Certificate of M.O.H. (Secs. 83 and 167, P.H.A. 1936)		0
7.—Number of First Visits made in consequence of Complaints by Residents	711	597
8.—Notices Served	724	
9.—Drains :—		
Tested by Smoke Test	16	6
Tested by Volatile Test	33	8
Tested by Water Test	0	0
Exposed under Sec. 48, P.H.A. 1936	0	0
Drains reported choked		225
Drains reconstructed		9
Drains repaired		58
Bath, lavatory, or sink waste pipes disconnected from drains		0
New pans fixed to closets		46
Indoor soil pipes abolished		0
Closets supplied with flushing apparatus		0
10.—Contraventions of Byelaws :—		
Animals kept so as to be a nuisance		2
Animals kept in contravention of Byelaws		0
Accumulations of manure, etc., at :—		
(*a*) Houses		4
(*b*) Other premises		4
Other contraventions		0
11.—Other Nuisances :—		
Overcrowding in houses		9
Yard pavings relaid or repaired		46
Spoutings repaired or renewed		131
New slop sinks fixed		7
Houses supplied with town water		0
Chimney observations	8	2
Miscellaneous nuisances		301

Continued on next page.

TABLE 5.—*continued.*

	Number of Inspections, etc.	No. at which Nuisances, Defects, etc., were Found.
12.—Factories Act—Inspections of :—		
Factories with mechanical power	171	25
Factories without mechanical power	32	5
Other premises	42	3
Outworkers' premises	60	0
13.—Dairies, Cowsheds, and Milkshops :—		
Number of Inspections	435	3
Number of New Registrations	3	
14.—Bakehouses—Number of Inspections	171	9
15.—Slaughterhouses :—		
Number of Inspections	1598	43
16.—Other Premises where Food is Manufactured, Stored, or Exposed for Sale—Number of Inspections	2069	24
17.—Food and Drugs Act—Number of Samples sent to Public Analyst	296	16
18.—Infectious Diseases—Visits to Infected Houses :—		
(*a*) First visits for investigation	222	
(*b*) Weekly visits to secure isolation	158	
(*c*) Visits to control disinfection	151	
19.—Number of Visits for Inspection of :—		
(*a*) Schools	58	1
(*b*) Public Lavatories	144	1
(*c*) Van-dwellers	1	0
(*d*) Cinemas, etc.	26	4
(*e*) Restaurant Kitchens, Teashops, etc.	119	8
(*f*) Shops	11	5
(*g*) Offensive Trades	20	0
20.—Houses Inspected under Housing Consolidated Regulations, 1925 and 1932 :—		
Number of Houses Inspected	796	489
Defective Houses Repaired		406
Houses Cleansed and Whitewashed		315
21.—Houses Unfit for Human Habitation reported under Housing Act, 1936 :—		
(*a*) Section 9	0	0
(*b*) Section 11	0	0
(*c*) Section 12	0	0
(*d*) Section 25	0	0

Table 6. Northampton, 1945.

Reconstruction of Drains.

SITUATION OF PREMISES.	NO. OF HOUSES.
Commercial Street, 6, 8, 10	3
Raynsford Road, "Sunny Cot"	1
St. Andrew's Road, 58, 59, 60, 61	4
St. James' Park Road, 76A	1
Total	9

Table 7. Northampton, 1938–1945.

Housing Act, 1936. Houses Represented Previous to 1945.

Subsequent Action and Condition at the End of 1945.

HOUSES.	DATE OF		REMARKS.
	Representations.	Demolition Orders.	
Bath Street, 38, 40, 42, 44, and 46	11–3–42	—	No. 40 occupied; remainder vacant.
King Street, 12	13–1–43	—	Occupied.
Scarletwell Street, 8	12–4–39	—	Occupied.
Scarletwell Street, 67	16–9–42	—	Vacant and derelict.
Wellingborough Road, Abington Cottages, 9, 10, 11, and 12	13–4–38	—	All standing empty.

Table 8. Northampton, 1945.

Administration of the Factories Act, 1937.

1.—*Inspections made by the Sanitary Inspectors for purposes of provisions as to health.*

PREMISES.	NUMBER OF		
	INSPECTIONS.	WRITTEN NOTICES.	OCCUPIERS PROSECUTED.
Factories with mechanical power ..	171	25	—
Factories without mechanical power	32	5	—
Other Premises under the Act (including works of building and engineering construction but not including outworkers' premises) ..	42	3	—
Totals	245	33	—

2.—*Defects found.*

PARTICULARS.	NUMBER OF DEFECTS			No. of Defects in respect of which Prosecutions were instituted.
	Found.	Remedied	Rreferred to H.M. Inspector	
Want of cleanliness (s. 1)	8	7	—	—
Overcrowding (s. 2)	—	—	—	—
Unreasonable temperature (s. 3)	—	—	—	—
Inadequate ventilation (s. 4)	—	—	—	—
Ineffective drainage of floors (s. 6)	—	—	—	—
Sanitary conveniences (s. 7) — insufficient	1	—	—	—
Sanitary conveniences (s. 7) — unsuitable or defective	16	14	—	—
Sanitary conveniences (s. 7) — not separate for sexes	1	1	—	—
Other offences	7	2	—	—
Totals	**33**	**24**	—	—

Continued on next page.

TABLE 8.—*continued.*

3.—*Outwork in unwholesome premises* (s. 111).

NATURE OF WORK.	INSTANCES.	NOTICES SERVED.	PROSE-CUTIONS.
——	—	—	—

TABLE 9. NORTHAMPTON, 1945.

UNSOUND FOOD VOLUNTARILY SURRENDERED.

NATURE OF FOOD.	WEIGHT.			
	TONS.	CWT.	QR.	LB.
Beef, home killed	59	12	3	18
Mutton, home killed	2	0	0	27
Offal, home killed	46	15	2	26
Offal, imported	—	1	2	12
Pork, home killed	3	7	1	12
Pork, imported	—	6	0	0
Veal, home killed	—	12	2	15
Bacon	—	6	3	22
Canned meats	—	18	3	9
Cheese	—	—	3	5
Cocoa, etc.	—	2	2	13
Cooking fat	—	—	—	26
Egg powder	—	1	1	4
Fish and shell-fish	10	7	2	7
Flour and cereals	3	15	2	16
Fruit	2	8	0	24
Meat extract	—	—	—	25
Preserves	—	5	1	14
Sausages	—	3	3	3
Sugar	—	5	3	18
Tea	—	2	2	9
Vegetables	6	15	3	24
Yeast	—	3	2	0
Total	138	15	3	21

Also 10,786 tins and jars of food, together with 3,182 beef cubes, 24 bundles of celery, 1,733 crumpets, 120 eggs, 72 fish cakes, 6 gallons ice-cream, 100 lobsters, 116 meat pies, 528 rabbits, and $4\frac{3}{4}$ gallons of synthetic cream.

There were 2,499 surrenders but no seizures of unsound food.

Table 10. Northampton, 1945.

Carcases Inspected and Condemned.

	CATTLE, EXCLUDING COWS.	COWS.	CALVES.	SHEEP AND LAMBS.	PIGS.
Number killed	5,489	2,647	7,524	23,339	1,645
Number inspected	5,486	2,600	7,524	23,298	1,606
All diseases except Tuberculosis :— Whole carcases condemned	14	63	16	114	22
Carcases of which some part or organ was condemned	1,333	961	53	1,168	176
Percentage of the number inspected affected with disease other than tuberculosis ..	24·6	39·4	0·9	5·5	12·3
Tuberculosis only :— Whole carcases condemned	91	125	9	0	9
Carcases of which some part or organ was condemned	930	550	7	0	55
Percentage of the number inspected affected with tuberculosis ..	18·6	26·0	0·2	0·0	4·0

Table 11. Northampton, 1945.

Borough Infectious Diseases Hospital, Harborough Road.

Cases under Treatment.

	Scarlet Fever.	Diphtheria.	Whooping Cough.	Erysipelas.	Others.	Totals.
Remaining at end of 1944 ..	9	7	—	—	—	16
Admitted during 1945	89	34	1	1	28*	153
Discharged during 1945	85	29	—	1	28	143
Died during 1945	—	—	1	—	—	1
Remaining at end of 1945 ..	13	12	—	—	—	25

*Includes the following cases :—measles 11, mumps 10, Sonne dysentery 3, chickenpox 2, and rubella 2.

Table 12. Northampton, 1945.

Food and Drugs. Samples taken for Analysis.

Nature of Sample.	Formal Samples.		Informal Samples.	
	Total Number.	No. not Genuine.	Total Number.	No. not Genuine.
Arrowroot	1	—	1	—
Aspirin tablets	—	—	2	—
Baking powder	2	—	3	1
Cake and pudding mixture	2	1	4	—
Castor oil	—	—	4	—
Cinnamon	1	—	—	—
Cocoa	6	—	3	—
Cod liver oil	—	—	2	—
Coffee	3	—	—	—
Cough mixture	—	—	3	—
Custard powder, etc.	—	—	5	—
Eucalyptus oil	—	—	2	—
Fish pastes	—	—	5	—
Flour, etc.	3	—	5	—
Formalin tablets	—	—	2	—
Ginger	1	—	—	—
Glycerine	—	—	4	—
Gravy salt, etc.	—	—	2	—
Ground nutmeg	1	—	—	—
Health salts	—	—	3	—
Lemon substitute	1	—	—	—
Meat pastes	2	—	7	—
Menthol ointment	—	—	2	—
Milk	148	9	—	—
Milk, sterilised	28	3	—	—
Mustard	—	—	3	—
Oats (rolled)	1	—	—	—
Orange squash	1	—	—	—
Pearl barley	—	—	1	1
Sausages	2	—	—	—
Semolina	1	—	3	1
Soup and soup powder	1	—	1	—
Sundry drugs, etc.	—	—	16	—
Vinegar	4	—	—	—
Yeast tablets, etc.	—	—	4	—
Totals	209*	13	87*	3

* A total of 296 samples, 16 of which (5·4 per cent.) were found not to be genuine.

Table 13. Northampton, 1945.

Clinical Bacteriology. Number of Suspected Cases in which Examination was Made and the Number and Nature of the Reports Received in Connection with These.

Diphtheria—Throat and Nose Secretions.				Typhoid, Dysentery, Etc.—Dreyer's Tests, etc.				Tuberculosis—Sputum, Urine, etc.				Other Conditions.				Totals.			
No. of Suspected Cases.	Reports received.			No. of Suspected Cases.	Reports received.			No. of Suspected Cases.	Reports received.			No. of Suspected Cases.	Reports received.			No. of Suspected Cases.	Reports received.		
	Positive.	Negative.	Total.		Positive.	Negative.	Total.		Positive.	Negative.	Total.		Positive.	Negative.	Total.		Positive.	Negative.	Total.
269	100	432	532	53	43	41	84	643	152	691	843	10	4	6	10	975	299	1170	1469

The above Table does not take into account the reports made in connection with the venereal diseases scheme.

TABLE A.

COUNTY BOROUGH OF NORTHAMPTON.

Vital Statistics during 1945 and Previous Years.

Year.	Total Population estimated to Middle of each Year.	Live Births.			Total Deaths registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Uncorrected Number.	Nett.				Non-residents registered in the District.	Residents not registered in the District.	Under One Year.		At all Ages.	
			Number.	Rate.	Number.	Rate.			Number.	Rate per 1,000 Live Births.	Number.	Rate.
1906	88610	1985	1985	22·4	1108	12·5	77	22	240	120·9	1061	12·0
1907	88915	1956	1956	22·0	1209	13·6	98	37	235	120·1	1151	12·9
1908	89223	2043	2043	22·9	1192	13·4	93	32	198	96·9	1131	12·7
1909	89534	1957	1957	21·9	1332	14·9	84	46	215	109·9	1294	14·5
1910	89843	1900	1900	21·1	1177	13·1	84	36	209	110·0	1129	12·6
1911	90152	1930	1931	21·4	1240	13·8	86	46	250	129·5	1200	13·3
1912	90467	1932	1935	21·4	1172	13·0	120	45	140	72·4	1097	12·1
1913	90793	1868	1868	20·6	1233	13·6	114	61	175	93·7	1180	13·0
1914	91123	1854	1857	20·4	1331	14·6	133	55	164	88·3	1253	13·8
1915	91123	1748	1754	19·2	1562	17·3	109	83	236	134·5	1536	17·0
1916	93709	1883	1893	20·2	1206	14·0	116	58	127	67·1	1148	13·3
1917	91932	1466	1471	16·0	1217	14·8	128	86	128	87·0	1175	14·2
1918	90884	1316	1313	14·4	1426	17·6	122	81	121	92·2	1385	17·1
1919	92653	1432	1411	15·2	1301	14·6	137	54	116	82·2	1218	13·7
1920	92950	2318	2248	24·2	1137	12·3	130	40	166	73·8	1047	11·3
1921	92300	1924	1881	20·4	1022	11·1	123	65	124	65·9	964	10·4
1922	92950	1697	1646	17·7	1108	11·9	116	54	86	52·2	1046	11·3
1923	93230	1723	1662	17·8	1177	12·6	140	49	95	57·2	1086	11·6
1924	93800	1591	1534	16·4	1143	12·2	149	42	80	52·1	1036	11·1
1925	93970	1531	1471	15·6	1229	13·1	167	54	98	66·6	1116	11·9
1926	93740	1393	1309	14·0	1163	12·4	174	75	72	55·0	1064	11·4
1927	93260	1362	1281	13·7	1248	13·4	170	46	78	60·9	1124	12·0
1928	94270	1366	1308	13·9	1204	12·8	207	63	70	53·5	1060	11·3
1929	94180	1332	1249	13·3	1269	13·5	226	50	66	52·8	1093	11·6
1930	93460	1334	1224	13·1	1217	13·0	193	48	69	56·4	1072	11·5
1931	92970	1307	1233	13·3	1243	13·4	205	53	87	70·6	1091	11·8
1932	96730	1326	1244	13·0	1265	13·2	207	50	80	64·3	1108	11·6
1933	96630	1236	1152	11·9	1277	13·2	236	50	52	45·1	1091	11·3
1934	96550	1298	1180	12·2	1344	13·9	289	41	54	45·8	1096	11·4
1935	96700	1301	1155	11·9	1311	13·6	298	38	58	50·2	1051	10·9
1936	96300	1419	1204	12·5	1448	15·0	298	59	48	39·9	1209	12·6
1937	96360	1518	1197	12·4	1465	15·2	302	54	57	47·6	1217	12·6
1938	96540	1556	1203	12·5	1294	13·4	283	60	56	46·6	1071	11·1
1939	96440	1704	1190	12·3	1458	14·7	368	65	52	41·7	1155	11·6
1940	103700	1847	1229	11·9	1812	17·5	418	52	69	49·0	1446	13·9
1941	108930	2101	1282	11·8	1776	16·3	450	69	91	52·9	1395	12·8
1942	101800	2133	1597	15·7	1468	14·4	362	61	68	42·6	1167	11·5
1943	98150	2244	1761	17·9	1616	16·5	390	64	69	39·2	1290	13·1
1944	100040	2627	2074	20·7	1583	15·8	416	53	96	46·3	1220	12.2
1945	98520	2412	1788	18·1	1586	16·1	382	69	72	40·3	1273	12·9

This Table is arranged to shew the gross births and deaths in the district and the births and deaths properly belonging to it, with the corresponding rates.

The birth-rate and death-rate for 1932 are calculated on a mean population of 95,670 owing to the Borough extension on 1st April, 1932.

From 1915 to 1931 and also in 1939 the death-rates are based on the estimated civil populations supplied by the Registrar-General for that purpose. The population for death-rate calculation in 1939 was 99,290.

The table excludes the following non-civilian deaths, viz :— 1939, nil; 1940, 12; 1941, 21; 1942, 10; 1943, 19; 1944, 14; 1945, 11.

TABLE B.

COUNTY BOROUGH OF NORTHAMPTON.

Cases of Notifiable Diseases during the Year 1945.

NOTIFIABLE DISEASES.	NUMBER OF CASES NOTIFIED.													CASES NOTIFIED IN EACH WARD.												Cases Admitted to Borough Hospitals.	Total Deaths (*see* Table C)
	All Ages.	AGES (IN YEARS).												Castle.	Delapre.	Kingsley.	Kingsthorpe.	St. Crispin's.	St. Edmund's.	St. George's.	St. James'.	St Michael's.	South.	Spencer	Weston		
		0–	1–	2–	3–	4–	5–	10–	15–	20–	35–	45–	65–														
Cerebro-spinal Fever	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Diphtheria	25	—	—	—	—	—	6	1	6	8	1	2	1	9	2	3	1	2	2	2	—	1	—	1	2	22*	—
Dysentery	10	—	1	—	1	—	1	—	2	—	3	1	1	—	—	—	—	—	—	3	—	—	1	—	6	1*	—
Enterica	2	—	—	—	—	—	—	1	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—
Erysipelas	20	—	—	—	—	—	—	—	—	1	3	16	—	—	2	1	1	3	1	3	—	7	1	—	1	1*	—
Malaria (contracted abroad)	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Measles	1396	52	153	168	198	177	606	22	6	11	3	—	—	99	149	139	150	89	63	148	140	87	55	204	73	5*	3
Pneumonia	106	14	8	3	3	3	15	7	4	7	14	19	9	5	5	15	21	9	4	7	9	7	2	14	8	1†	41‖
Puerperal Pyrexia	79	—	—	—	—	—	—	—	—	5	65	9	—	2	3	2	6	4	4	6	1	1	42	7	1	6‡	—
Scarlet Fever	162	—	4	10	17	19	86	15	3	5	2	1	—	10	8	15	14	12	2	33	12	15	3	31	7	89*	—
Whooping Cough	64	4	9	12	10	12	17	—	—	—	—	—	—	2	8	31	3	2	2	—	1	5	—	—	10	1*	1
Tuberculosis :—																											
Respiratory	106	—	—	—	—	—	1	2	17	38	21	25	2	8	8	5	12	10	5	9	6	13	5	17	8	53§	61
Other Forms	18	—	1	1	—	—	3	4	1	3	4	1	—	—	2	6	1	2	—	1	1	1	2	2	—	5¶	10
Totals	1990	71	176	194	229	211	735	52	40	79	116	74	13	135	188	217	209	133	83	213	170	137	111	277	117	184	116

*Admitted to Harborough Road Hospital.
†Admitted to St. Edmund's Hospital.
‡At St. Edmund's Hospital.
‖Three of these were from influenzal pneumonia.
§Twenty-one to Welford Road Hospital and thirty-two to Creaton Sanatorium.
¶Admitted to Manfield Hospital.

The above figures include non-civilian cases but take no account of corrections in diagnosis. (*See* Section VI. of this Report for further information).

No notifications were received of other notifiable diseases not specified in the Table above (e.g., smallpox).

INSTITUTIONS :—(1) Harborough Road Infectious Diseases Hospital (85 beds, allowing 144 sq. ft. per bed);
(2) Smallpox Hospital, Mere Way (48 beds, allowing 144 sq. ft. per bed) ;
(3) Welford Road Tuberculosis Hospital (32 beds) ;
(4) St. Edmund's Hospital (Public Assistance Institution) (423 beds) ;
(5) Creaton Sanatorium, Northamptonshire (25 beds reserved for Northampton County Borough) ;
(6) Manfield Orthopædic Hospital, Northampton (20 beds available for surgical tuberculosis cases).

TABLE C.

COUNTY BOROUGH OF NORTHAMPTON.

Causes of Death at Different Periods of Life during the Year 1945.

Causes of Death.	Nett Deaths at the Subjoined Ages (in Years) of "Residents" whether occurring within or without the District.														Total Deaths whether of Residents or Non-Residents in Institutions in the District.
	All Ages.			0–	1–	2–	5–	15–	25–	35–	45–	55–	65–	75–	
	Total.	M.	F.												
ALL CAUSES Certified	1263	630	633	72	9	4	11	21	22	53	80	182	357	452	823
ALL CAUSES Uncertified	10	8	2	—	—	—	—	—	—	—	1	3	2	4	—
*1. Typhoid and paratyphoid fevers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2. Cerebro-spinal fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
3. Scarlet fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4. Whooping cough	1	—	1	—	1	—	—	—	—	—	—	—	—	—	1
5. Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6. Tuberculosis of respiratory system	61	40	21	—	—	—	—	11	10	15	11	7	5	2	10
*7 Other forms of tuberculosis	10	6	4	1	1	—	3	2	1	2	—	—	—	—	18
8. Syphilitic disease	3	2	1	—	—	—	—	—	—	1	1	1	—	—	2
*9. Influenza	5	2	3	—	—	—	—	—	—	1	—	3	—	1	2
10. Measles	3	2	1	2	1	—	—	—	—	—	—	—	—	—	—
11. Acute poliomyelitis and polio-encephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12. Acute infectious encephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13M. Cancer of buccal cavity and œsophagus (males only)	6	6	—	—	—	—	—	—	—	—	—	3	1	2	4
13F. Cancer of uterus	13	—	13	—	—	—	—	—	—	—	1	5	4	3	2
14. Cancer of stomach and duodenum	32	21	11	—	—	—	—	—	—	3	3	3	15	8	21
15. Cancer of breast	19	—	19	—	—	—	—	—	1	1	4	6	5	2	8
16. Cancer of all other sites	118	59	59	—	—	—	—	—	2	8	10	19	49	30	80
17. Diabetes	6	2	4	—	—	—	—	—	—	—	—	2	3	1	7
18. Intra-cranial vascular lesions	122	55	67	—	—	—	—	—	—	1	6	18	57	40	42
19. Heart disease	438	224	214	—	—	—	—	1	3	5	12	64	131	222	190
*20. Other diseases of the circulatory system	21	11	10	—	—	—	—	—	—	—	1	4	9	7	18
21. Bronchitis	82	40	42	1	—	—	—	—	—	2	6	6	29	38	36
*22. Pneumonia	38	20	18	15	2	1	—	1	1	—	1	6	6	5	33
23. Other respiratory diseases	17	11	6	—	1	—	—	—	—	1	3	4	6	2	15
24. Ulceration of the stomach or duodenum	7	7	—	—	—	—	—	—	—	1	2	3	1	—	22
25. Diarrhœa (under two years of age)	6	5	1	6	—	—	—	—	—	—	—	—	—	—	4
26. Appendicitis	2	—	2	—	—	—	1	—	—	—	1	—	—	—	5
27. Other digestive diseases	18	10	8	1	—	—	—	—	—	1	4	4	4	4	44
28. Nephritis	22	12	10	—	—	1	1	—	1	3	2	3	5	6	16
29. Puerperal and post-abortive sepsis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30. Other maternal causes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31. Premature birth	20	9	11	20	—	—	—	—	—	—	—	—	—	—	34
32. Congenital malformations, birth injury, infantile disease	18	9	9	17	—	—	1	—	—	—	—	—	—	—	31
33. Suicide	11	6	5	—	—	—	—	—	—	2	3	1	4	1	2
34. Road traffic accidents	4	4	—	—	—	—	2	1	1	—	—	—	—	—	11
35. Other violent causes	21	13	8	5	1	—	2	3	1	1	—	2	2	4	16
*36. All other causes	149	62	87	4	2	2	1	2	1	5	10	21	23	78	148
Totals	1273	638	635	72	9	4	11	21	22	53	81	185	359	456	823
*Sub-entries included in above figures: 1 (a) Paratyphoid fevers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7 (a) Tuberculous meningitis	2	2	—	1	1	—	—	—	—	—	—	—	—	—	4
9 (a) Influenzal pneumonia	3	1	2	—	—	—	—	—	—	1	—	2	—	—	1
20 (a) Arterio-sclerosis	9	5	4	—	—	—	—	—	—	—	—	2	3	4	7
22 (a) Broncho-pneumonia	27	13	14	14	1	1	—	1	—	—	1	2	4	3	25
36 (a) Rheumatic fever	2	1	1	—	—	—	—	—	—	1	—	1	—	—	2
(b) Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
(c) Senility	69	25	44	—	—	—	—	—	—	—	1	—	10	58	51
(d) Erysipelas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(e) Dysentery	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Nett Deaths Registered.	M.	F.	Totals.	Death-Rates.
First Quarter	213	193	406	16·5
Second Quarter	138	141	279	11·3
Third Quarter	117	132	249	10·1
Fourth Quarter	170	169	339	13·8
Totals (52 weeks)	638	635	1273	12·9

TABLE D.

COUNTY BOROUGH OF NORTHAMPTON.

INFANT MORTALITY DURING THE YEAR 1945.

Nett Deaths from stated Causes at various Ages under One Year.

Causes of Death.	Under 1 week.	1 week and under 2 weeks.	2 weeks and under 3 weeks.	3 weeks and under 4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total Deaths under 1 year.
ALL CAUSES — Certified	32	4	2	3	41	6	11	12	2	72
ALL CAUSES — Uncertified	—	—	—	—	—	—	—	—	—	—
1. Smallpox	—	—	—	—	—	—	—	—	—	—
2. Chickenpox	—	—	—	—	—	—	—	—	—	—
3. Measles	—	—	—	—	—	—	—	1	1	2
4. Scarlet Fever	—	—	—	—	—	—	—	—	—	—
5. Whooping Cough	—	—	—	—	—	—	—	—	—	—
6. Diphtheria	—	—	—	—	—	—	—	—	—	—
7. Erysipelas	—	—	—	—	—	—	—	—	—	—
8. Tuberculous Meningitis	—	—	—	—	—	—	—	1	—	1
9. Abdominal Tuberculosis	—	—	—	—	—	—	—	—	—	—
10. Other Tuberculous Diseases	—	—	—	—	—	—	—	—	—	—
11. Meningitis (*not Tuberculous*)	—	—	—	—	—	—	—	—	—	—
12. Convulsions	—	—	—	—	—	—	1	—	—	1
13. Laryngitis	—	—	—	—	—	—	—	—	—	—
14. Bronchitis	—	—	—	—	—	—	—	1	—	1
15. Pneumonia (all forms)	1	2	1	—	4	4	4	3	—	15
16. Diarrhœa	—	—	—	—	—	—	—	—	—	—
17. Enteritis	—	—	—	1	1	1	1	3	—	6
18. Gastritis	—	—	—	—	—	—	—	—	—	—
19. Syphilis	—	—	—	—	—	—	—	—	—	—
20. Rickets	—	—	—	—	—	—	—	—	—	—
21. Suffocation, overlaying	1	—	—	—	1	—	2	2	—	5
22. Injury at Birth	1	—	—	—	1	—	—	—	—	1
23. Atelectasis	4	—	—	—	4	—	—	—	—	4
24. Congenital Malformations	5	—	—	1	6	—	1	1	1	9
25. Premature Birth	16	1	1	1	19	1	—	—	—	20
26. Atrophy, Debility, and Marasmus	—	—	—	—	—	—	—	—	—	—
27. Other Causes	4	1	—	—	5	—	2	—	—	7
Totals	32	4	2	3	41	6	11	12	2	72

	Live Births Registered.			Nett Deaths Registered.			Infant Death-rates.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Legitimate ..	833	765	1598	34	19	53	40·8	24·8	33·2
Illegitimate ..	99	91	190	7	12	19	70·7	131·9	100·0
Totals ..	932	856	1788	41	31	72	44·0	36·2	40·3